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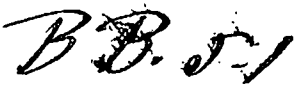

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CATALOGUE

OF

HYMENOPTERA.

Div. II. ACULEATA.

Tribe 4. ANTHOPHILA.

Fam. 2. APIDÆ.

Subfam. 2. DASYGASTRÆ.

Genus 14. ANTHIDIUM.

Apis, pt., *Linn. Syst. Nat.* i. 953, 1766.
Anthidium, *Fabr. Syst. Piez.* p. 364, 1804.
Megachile, pt., *Latr. Hist. Nat.* xiv. 51, 1805.
Trachusa, pt., *Jurine, Hym.* p. 252, 1809.

1. ANTHIDIUM MANICATUM. B.M.

Apis manicata, *Linn. Faun. Suec.* 1701; *Syst. Nat.* i. 958. 28, ♂.
Fabr. Syst. Ent. 384. 35; *Ent. Syst.* ii. 330. 73.
Schäff. Icon. Ins. t. 32. f. 11, 12.
Rossi, Faun. Etrus. ii. 103. no. 914.
Christ. Hym. p. 133. t. 9. f. 5.
Kirby, Mon. Ap. Angl. ii. 248. 47. t. 16. f. 12 ♀, 13 ♂.
Don. Brit. Ins. xiv. 57. t. 489.
Apicis dentata ♂, pervigil ♀, *Harris, Expos.* p. 161. t. 49. f. 1 ♂ 2 ♀.

Anthidium manicatum, *Fabr. Syst. Piez.* p. 364. 1.
Curtis, Brit. Ent. iv. *Hym.* t. 61.
Latr. Ann. Mus. Hist. Nat. xiii. 212. 5.
St. Farg. Hym. ii. 355. 4.
Smith, Zool. iv. 1452. 1.
Nyland. Ap. Boreal. p. 265. 22.
Apis maculata, *Fabr. Ent. Syst.* ii. 332. 77, var. ♀.
Panz. Faun. Germ. 7. 14.

Hab. Britain; France; Italy; Switzerland; Germany; Denmark; Sweden; Finland.

2. ANTHIDIUM DIADEMA. B.M.

Anthidium diadema, *Latr. Ann. Mus. Hist. Nat.* xiii. 223. 14.
St. Farg. Hym. ii. 363. 10.

Hab. France; Algeria.

3. ANTHIDIUM FLORENTINUM.

Apis florentina, *Fabr. Ent. Syst.* ii. 331. 74.
Oliv. Ency. Méth. iv. 73.
Anthidium florentinum, *Fabr. Syst. Piez.* 366. 3.
Panz. Faun. Germ. 105. 20.
Latr. Ann. Mus. Hist. Nat. xiii. 211. 4.
St. Farg. Hym. ii. 359. 7. p. 13. f. 4, 5.
Megachile florentinum, *Latr. Hist. Nat. Crust. Ins.* xiv. 55.
Anthophora florentina, *Illig. Mag.* p. 117.
Trachusa florentina, *Jurine, Hym.* p. 253.

Hab. France; Italy; Germany; Albania.

4. ANTHIDIUM ANNULATUM.

Anthidium annulatum, *St. Farg. Hym.* ii. 388.

Hab. France (Forest of St. Germain).

5. ANTHIDIUM CONTRACTUM.

Anthidium contractum, *Latr. Ann. Mus. Hist. Nat.* xiii. 229. 22.
St. Farg. Hym. ii. 375. 21.

Hab. France; Dalmatia; Africa.

6. ANTHIDIUM CINGULATUM.

Anthidium cingulatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 219. 10. pl. 1. f. 4.
St. Farg. Hym. ii. 378. 21.
Lucas, Expl. Sc. Algér. iii. 201. 129.

Hab. France; Montpellier; Barbary; Algeria.

7. ANTHIDIUM FLAVILABRE.

Anthidium flavilabre, *Latr. Ann. Mus. Hist. Nat.* xiii. 222. 13.
St. Farg. Hym. 372. 18.

Hab. France.

8. ANTHIDIUM FUSCIPENNE.

Anthidium fuscipenne, *St. Farg. Hym.* ii. 369. 15 ♂.

Hab. France.

9. ANTHIDIUM FASCIATUM.

Anthidium fasciatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 220. 11.
St. Farg. Hym. ii. 382. 29.

Hab. France; Dalmatia; Spain.

10. ANTHIDIUM LITURATUM. B.M.

Apis liturata, *Panz. Faun. Germ.* 80. 21.
Anthidium lituratum, *Jurine, Hym.* p. 250.
Latr. Ann. Mus. Hist. Nat. xiii. 226. 18.
St. Farg. Hym. ii. 371. 17.
Megachile florentina (minor), *Spin. Ins. Lig.* fasc. 1. 138.
Trachusa liturata, *Jurine, Hym.* p. 253.
Anthophora liturata, *Illig. Mag.* (1806) p. 118 ♀.

Hab. France; Germany; Albania.

11. ANTHIDIUM LUTEIPES.

Anthidium luteipes, *St. Farg. Hym.* ii. 368. 14 ♂.

Hab. France.

12. ANTHIDIUM NASUTUM.

Anthidium nasutum, *Latr. Ann. Mus. Hist. Nat.* xiii. 233. 25.

Hab. France.

13. ANTHIDIUM OBLONGATUM.

Megachile interrupta, *Latr. Hist. Nat. Crust. Ins.* xiv. 56.
Spin. Ins. Lig. fasc. 1. p. 137.
Apis manicata, *Panz. Faun. Germ.* 55. 10 ♂.
Anthidium oblongatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 216. 7.
St. Farg. Hym. ii. 391. 37.

Hab. France; Switzerland.

14. ANTHIDIUM PUNCTATUM.

Anthidium punctatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 217. 8.
St. Farg. Hym. ii. 364. 11.

Hab. France.

15. ANTHIDIUM PARVULUM. B.M.

Anthidium parvulum, *Fabr. Hym.* ii. 403. 50.

Hab. France.

16. ANTHIDIUM PROVENCIALE.

Anthidium Provenciale, *St. Farg. Hym.* ii. 395. 40.

Hab. Provence; Spain.

17. ANTHIDIUM QUADRIDENTATUM.

Anthidium quadridentatum, *St. Farg. Hym.* ii. 402. 49.

Hab. France.

18. ANTHIDIUM STRIGATUM.

Trachusa strigata, *Panz. Faun. Germ.* 14. 14.
Jurine, Hym. 253.
Anthidium strigatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 228. 21.
St. Farg. Hym. ii. 373. 19.

Hab. France; Germany.

19. ANTHIDIUM STICTICUM. B.M.

Apis stictica, *Fabr. Ent. Syst.* ii. 331. 76.
Oliv. Ency. Méth. iv. 70.
Dumér. Dict. Sc. Nat. i. 144.
Anthidium stictícum, *Fabr. Syst. Piez.* 366. 5.
Latr. Ann. Mus. Hist. Nat. xiii. 208. 1. pl. 1. f. 1.
St. Farg. Hym. ii. 352. 2.
Lucas, Explo. Sc. Algér. iii. 197. 125.
Trachusa stictica, *Jurine, Hym.* p. 253.

Hab. France; Italy; Algeria.

20. ANTHIDIUM SEPTEMDENTATUM. B.M.

Megachile florentina, *Spin. Ins. Lig.* fasc. 1. 137.
Anthidium septemdentatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 210. 3.
St. Farg. Hym. ii. 353. 3.

Hab. France; Italy.

21. ANTHIDIUM SEPTEMSPINOSUM.

Anthidium septemspinosum, *St. Farg. Hym.* ii. 359. 6 ♂.

Hab. France.

22. ANTHIDIUM NIGRICEPS. B.M.

Female. Length 4½ lines.—Black, the vertex has a yellow dot on each side behind the eyes, and as well as the disk of the thorax has a dusky ferruginous pubescence; the cheeks, thorax beneath and its sides, as well as the metathorax, covered with griseous pubescence; that on the face and the tarsi is of a pale glittering yellowish-white; on the tarsi beneath it is fusco-ferruginous; wings subhyaline, faintly clouded at their apical margins, also a fuscous streak in a line with the stigma across the marginal cell. Abdomen, a small lunate spot on each side of the basal segment, a lateral oblong stripe on the second broadest within, and the three following have on each side an ovate macula; the apical segment notched laterally, and its margin crenulated.

Hab. Polish Ukraine.

23. ANTHIDIUM TÆNIATUM.

Anthidium tæniatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 220. 12.

Hab. Spain.

24. ANTHIDIUM SINUATUM.

Anthidium sinuatum, *St. Farg. Hym.* ii. 374. 20.

Hab. Spain.

25. ANTHIDIUM SCUTELLARE.

Anthidium scutellare, *Latr. Ann. Mus. Hist. Nat.* 215. 6. *St. Farg. Hym.* ii. 389. 35.

Hab. Spain.

26. ANTHIDIUM RUBIGINOSUM.

Anthidium rubiginosum, *St. Farg. Hym.* ii. 396. 41.

Hab. Spain; Arabia.

27. ANTHIDIUM LATREILLII.

Anthidium Latreillii, *St. Farg. Hym.* ii. 393. 39.

Hab. Spain.

28. ANTHIDIUM FERRUGINEUM.

Apis ferruginea, *Oliv. Ency. Méth.* iv. 74, 75 ♀.
Anthidium ferrugineum, *Fabr. Syst. Piez.* p. 367. 11
Latr. Ann. Mus. Hist. Nat. xiii. 224. 15.
Spin. Ann. Soc. Ent. Fr. vii. 521. 67.

Hab. Spain; Arabia.

29. ANTHIDIUM DUFOURII.

Anthidium Dufourii, *St. Farg. Hym.* ii. 380. 26.

Hab. Spain.

30. ANTHIDIUM CORONATUM.

Female. Length 4 lines.—Black, the clypeus, inner orbits of the eyes nearly reaching their vertex, a spot in front of the anterior stemma, the mandibles and outer orbits of the eyes yellow, the latter broadly so towards the vertex; the three basal joints of the flagellum and apex of the scape ferruginous. Thorax, the margin of the scutellum, the tegulæ, a line in front, the collar, sometimes interrupted, the tubercles and a spot beneath them yellow; the disk sometimes encircled with yellow; the legs yellow; the coxæ, trochanters and base of the femora beneath fusco-ferruginous, the two former have their tips ferruginous. Abdomen, a transverse yellow band at the basal margin of each segment, the first interrupted and acuminate, the second very slightly interrupted, the three following slightly emarginate on their inferior margin, the sixth segment entirely yellow; beneath densely clothed with golden-yellow pubescence.

Hab. Albania. (In the Coll. of W. W. Saunders, Esq.)

31. ANTHIDIUM CIMBICIFORME, B.M.

Female. Length 7 lines.—Head yellow, the anterior margin of the clypeus crenulated, the crenulation, labrum and teeth of the mandibles black, the latter has its margins stained with ferruginous; the front has an oblong black patch extending from the base of the clypeus a little beyond the posterior stemmata, in front of the anterior stemma is a small circular spot and a triangular one above the clypeus yellow; the black patch gradually narrows from the insertion of the antennæ to the stemmata, where it again becomes wider, enclosing them; antennæ ferruginous, darkest towards their apex, the scape yellow. Thorax yellow, having a broad black line down the centre, extending to the scutellum, from which on each side a narrower line passes forwards, terminating opposite the tegulæ, which are also yellow

and have a ferruginous spot in the middle; the margin of the scutellum broadly yellow and quadrilobate; the metathorax and breast black, legs yellow, the tibiæ having an oblong black stain beneath; the femora are also more or less black in front, the apical joints of the tarsi ferruginous; wings fusco-hyaline, darkest towards their anterior margins. Abdomen, each segment has a very broad yellow band, the first and second interrupted, the third, fourth and fifth notched above; beneath densely clothed with yellow pubescence.

Male.—Closely resembling the female, but the disk of the thorax is sometimes entirely black, the margins only being bordered with yellow; or having indistinct yellow or ferruginous lines, that portion of the abdomen which is black in the female is more or less ferruginous in the male; the apical segment has a single stout spine in the centre, rounded at its apex and bright ferruginous.

Hab. Albania.

32. ANTHIDIUM BINOMINATUM.

Anthidium rufiventre, *Brullé, Expéd. Sc. Morée*, iii. 339. 752. pl. 48. f. 7 (not of *Latr.*).

Hab. Morea.

33. ANTHIDIUM SULPHUREUM.

Anthidium sulphureum, *St. Farg. Hym.* ii. 367. 13 ♂.

Hab. Sicily.

34. ANTHIDIUM LATERALE.

Anthidium laterale, *Latr. Ann. Mus. Hist. Nat.* xiii. 209. 2 ♀. t. 1. f. 2.
St. Farg. Hym. ii. 400. 45.

Hab. Barbary.

35. ANTHIDIUM FLAVUM.

Anthidium flavum, *Latr. Ann. Mus. Hist. Nat.* xiii. 225. 17. pl. 1. f. 6.
St. Farg. Hym. ii. 397. 42.

Hab. Barbary.

36. ANTHIDIUM SUBSPINOSUM.

Anthidium subspinosum, *Klug, Symb. Phys.* Dec. iii. no. 2. t. 28. f. 2.

Hab. Syria.

37. ANTHIDIUM MELANURUM.
Anthidium melanurum, *Klug, Symb. Phys.* Dec. iii. no. 3. t. 28. f. 3.
Hab. Syria.

38. ANTHIDIUM ACULEATUM.
Anthidium aculeatum, *Klug, Symb. Phys.* Dec. iii. no. 1. t. 28. f. 1.
Hab. Syria.

39. ANTHIDIUM AURITUM.
Anthidium auritum, *Klug, Symb. Phys.* Dec. iii. no. 9. t. 28. f. 9.
Hab. Nubia (Saccahram).

40. ANTHIDIUM ALTERNANS.
Anthidium alternans, *Klug, Symb. Phys.* Dec. iii. no. 10. t. 28. f. 10.
Hab. Nubia (Saccahram).

41. ANTHIDIUM CINCTUM.
Anthidium cinctum, *Klug, Symb. Phys.* Dec. iii. no. 8. t. 28. f. 8.
Hab. Nubia (Amboukohl).

42. ANTHIDIUM PULCHELLUM.
Anthidium pulchellum, *Klug, Symb. Phys.* Dec. iii. no. 11. t. 28. f. 11.
Spin. Ann. Soc. Ent. Fr. vii. 526. 68.
Hab. Nubia (Saccahram).

43. ANTHIDIUM THORACICUM.
Anthidium thoracicum, *Klug, Symb. Phys.* Dec. iii. no. 7. t. 28. f. 7.
Hab. Nubia (Saccahram).

44. ANTHIDIUM WALTLII.
Anthidium Waltlii, *Spin. Ann. Soc. Ent. Fr.* vii. 520. 66.
Hab. Egypt.

45. ANTHIDIUM FISCHERI.
Anthidium Fischeri, *Spin. Ann. Soc. Ent. Fr.* vii. 519. 65.
Hab. Egypt.

46. ANTHIDIUM GROHMANNI.
Anthidium Grohmanni, *Spin. Ann. Soc. Ent. Fr.* vii. 524.
Hab. Egypt.

47. ANTHIDIUM SICULUM.

Anthidium Siculum, *Spin. Ann. Soc. Ent. Fr.* vii. 525. 17.

Hab. Egypt.

48. ANTHIDIUM XANTHOPYGUM.

Anthidium xanthopygum, *Klug, Symb. Phys.* Dec. iii. no. 13. t. 28. f. 13.

Hab. Arabia Felix.

49. ANTHIDIUM TESSELLATUM.

Anthidium tessellatum, *Klug, Symb. Phys.* Dec. iii. no. 4. t. 28. f. 4.

Hab. Arabia Felix.

50. ANTHIDIUM HELVOLUM.

Anthidium helvolum, *Klug, Symb. Phys.* Dec. iii. no. 5. t. 28. f. 5.

Hab. Arabia Felix.

51. ANTHIDIUM POSTICUM.

Anthidium posticum, *Klug, Symb. Phys.* Dec. iii. no. 12. t. 28. f. 12.

Hab. Arabia Felix.

52. ANTHIDIUM ALBIVENTRE.

Anthidium albiventre, *St. Farg. Hym.* ii. 366. 12.

Hab. Algeria?

53. ANTHIDIUM AFRUM.

Anthidium afrum, *St. Farg. Hym.* ii. 387. 33.
Lucas, Explo. Sc. Algér. iii. 203. 132. pl. 8. f. 9.

Hab. Algeria.

54. ANTHIDIUM BARBARUM.

Anthidium barbarum, *St. Farg. Hym.* ii. 357. 5 ♂.
Lucas, Explo. Sc. Algér. iii. 199. 126. pl. 8. f. 6.

Hab. Algeria.

55. ANTHIDIUM BELLICOSUM.

Anthidium bellicosum, *St. Farg. Hym.* ii. 385. 32.
Lucas, Explo. Sc. Algér. iii. 202. pl. 8. f. 10.

Hab. Algeria.

56. ANTHIDIUM COMPTUM.

Anthidium comptum, *St. Farg. Hym.* ii. 398. 44.
Lucas, Explo. Sc. Algér. iii. 205. 136. pl. 9. f. 3.

Hab. Algeria.

57. ANTHIDIUM DISCOIDALE.

Anthidium discoidale, *Latr. Ann. Mus. Hist. Nat.* xiii. 225. 16. pl. 1. f. 5.
St. Farg. Hym. ii. 397. 43.
Lucas, Explo. Sc. Algér. iii. 205. 135.
Anthidium ferrugineum, *Spin. Ann. Soc. Ent. Fr.* vii. 523. var. E.

Hab. Algeria.

58. ANTHIDIUM FRONTALE.

Anthidium frontale, *St. Farg. Hym.* ii. 377. 22.
Lucas, Explo. Sc. Algér. iii. 201. 128. pl. 8. f. 8.

Hab. Algeria.

59. ANTHIDIUM FONTAINESII. B.M.

Anthidium Fontainesii, *St. Farg. Hym.* ii. 350. 1.
Lucas, Explo. Sc. Algér. iii. 196. 124. pl. 8. f. 4.

Hab. Algeria.

60. ANTHIDIUM KLUGII.

Anthidium Klugii, *Lucas, Explo. Sc. Algér.* iii. pl. 9. f. 2.

Hab. Algeria.

61. ANTHIDIUM NUMIDA.

Anthidium Numida, *St. Farg. Hym.* ii. 392. 38.
Lucas, Explo. Sc. Algér. 203. 133. pl. 9. f. 1.

Hab. Algeria.

62. ANTHIDIUM ORNATUM.

Anthidium ornatum, *St. Farg. Hym.* ii. 381. 29.
Lucas, Explo. Sc. Algér. iii. 201. 130.

Hab. Algeria.

63. ANTHIDIUM ORANIENSE.

Anthidium Oraniense, *St. Farg. Hym.* ii. 361. 8.
Lucas, Explo. Sc. Algér. iii. 200. 127. pl. 8. f. 5.

Hab. Algeria.

64. ANTHIDIUM SCAPULARE.

Anthidium scapulare, *Latr. Ann. Mus. H. N.* xiii. 227. 19. pl. 1. f. 8. *St. Farg. Hym.* ii. 379. 25.

Hab. Algeria.

65. ANTHIDIUM ABDOMINALE. B.M.

Thynnus abdominalis, *Fabr. Ent. Syst.* ii. 245. 3; *Syst. Piez.* p. 231. 3.

Hab. Port Natal.

66. ANTHIDIUM AFRICANUM. B.M.

Male. Length 5 lines.—Black, the clypeus and a triangular spot above, the sides of the face and a slender line along the inner orbits of the eyes above the insertion of the antennæ, not reaching their vertex, a short narrow stripe in front of the anterior stemma, and the mandibles exteriorly yellow. Thorax, a minute spot in front on the tegulæ, and the margin of the scutellum, narrowly, yellow; the latter very broad and produced half-way over the basal segment of the abdomen; the wings dark fuscous and having a purple tinge; the legs and abdomen ferruginous, the latter armed at the apex with three teeth, the central tooth stout and rounded at the apex, the lateral ones curved inwards and acute.

Hab. Sierra Leone. (The Rev. D. Morgan.)

This species is very probably the male of *A. bicolor*; the insect which I have considered to be St. Fargeau's species merely differs slightly in the coloration of the clypeus.

67. ANTHIDIUM CORDATUM. B.M.

Female. Length 3½ lines.—Black, strongly and closely punctured; a minute spot on the front a little below the anterior stemma; a narrow line down the inner margin of the eyes, a similar one on the margin of the vertex, the clypeus and face on each side as high as the insertion of the antennæ, and a spot at the base of the mandibles yellow. Thorax, a spot on the tubercles, another on the tegulæ, an epaulet over the tegulæ, a spot at each of the lateral angles of the scutellum and the legs yellow; the legs roughly punctured; the wings fusco-hyaline; their apical margins darkest. Abdomen cordate, the sides fulvo-testaceous, each segment having an elongate ovate yellow macula, the sixth segment entirely fulvo-testaceous, and having on each side a yellow macula; beneath fulvo-testaceous, the basal margins of the segments fuscous.

Hab. Port Natal.

68. ANTHIDIUM IMMACULATUM.

Female. Length 3½ lines.—Black, the face, cheeks, thorax on the sides and beneath densely clothed with griseous pubescence, on the vertex and disk of the thorax it is pale fulvous; the legs have also a thin griseous-white pubescence; the anterior and intermediate tarsi and the posterior pair beneath covered with bright fulvous pubescence, the claw-joints ferruginous. The abdomen above has a thin erect scattered pale yellow pubescence, becoming white towards the lateral margins; beneath, it is white at the sides and fulvous in the middle, the margins of all the segments narrowly testaceous.

Hab. The Cape of Good Hope. (In the Coll. of W. W. Saunders, Esq.)

69. ANTHIDIUM BICOLOR.

Anthidium bicolor, *St. Farg. Hym.* ii. 399. 45.

Hab. The Gambia.

70. ANTHIDIUM REVERSUM.

Female. Length 3 lines.—Black, the clypeus, inner orbits of the eyes as high as the insertion of the antennæ, the apex of the scape in front, an uninterrupted line on the margin of the vertex broadest behind the eyes, and the mandibles, yellow; the latter are ferruginous at their apex and armed with four or five stout acute teeth; the flagellum fulvous beneath. Thorax, a broad stripe on each side, the margin of the scutellum subinterrupted in the middle, and the legs yellow; the apical joints of the tarsi and the tegulæ ferruginous; the latter have a yellow spot in front; the femora fusco-ferruginous towards their base, wings subhyaline. Abdomen, the basal segment has on each side an oblong triangular macula, the following segments have a broad yellow band interrupted in the middle; the apical segment has two longitudinal yellow lines.

Hab. The Gambia. (Coll. F. Smith.)

71. ANTHIDIUM TRUNCATUM.

Female. Length 3 lines.—Black, the clypeus, a spot on each side and the mandibles exteriorly towards their base yellow, their margins and apex black or fusco-ferruginous, armed with four acute stout teeth; the intervals between them denticulate. The tibiæ and tarsi yellow, the former fusco-ferruginous beneath; the wings smoky, darkest at their anterior margins; a minute yellow spot in front of the tegulæ; the posterior margin of the scutellum broadly truncate. Abdomen, a broad oblong-ovate

macula on each segment laterally; the apical segment being entirely yellow, and having a central black dot.

Hab. The Gambia. (Coll. F. Smith.)

72. ANTHIDIUM VILLOSULUM.

Male. Length 5½ lines.—Black, the face as high as the stemmata and the cheeks densely covered with short pale yellow pubescence, the anterior margin of the clypeus fringed with the same, on the clypeus it is very sparing; the scape of the antennæ in front, the clypeus, sides of the face adjoining, a minute spot above the eyes and the mandibles yellow, the latter armed with three stout black teeth at their apex. The thorax on the sides and beneath, the tibiæ behind and all the tarsi above densely clothed with yellowish-white pubescence; the femora beneath, and the tarsi ferruginous; the anterior and intermediate tibiæ above and the posterior pair at the base yellow, the whole having a short scattered glittering pubescence; the disk of the thorax covered with short ochraceous pubescence, the scutellum rounded behind and slightly emarginate in the middle; a minute spot on each side of the collar, and a very narrow line on the posterior margin of the scutellum, yellow; the wings subhyaline, their nervures black, except towards the insertion of the wings, where they, as well as the tegulæ, are rufo-testaceous, the latter yellow at their anterior margins. The abdomen has four rows of small ovate yellow spots, the two outer rows touching the lateral margins; the sixth segment has only two central spots, from which an oblique line passes off to the lateral margins; the fifth and sixth segments are armed at their margins with a curved spine, the first pair yellow; the apical segment has two stout curved black spines; beneath, the apex ferruginous, and the lateral margins having a dense fringe of pale pubescence.

Hab. Africa. (The Gambia.)

73. ANTHIDIUM COLORATUM.

Female. Length 3½ lines.—Black, the face and cheeks clothed with long white pubescence, the vertex with fulvous; antennæ, legs and tegulæ pale ferruginous; a small white spot on the vertex behind the eyes. The thorax beneath and metathorax covered with white pubescence, on the disk with fulvous; the wings slightly ferruginous towards their base. Abdomen, the basal margins of the segments have on each side an elongate white stripe emarginate posteriorly, the stripes on the fifth segment almost uniting; the sixth segment has on each side a minute tooth; the ventral scopa golden-yellow.

Male. 3½ lines.—Very closely resembling the female, differing

only in having the clypeus and sides of the face white, in being more densely hairy, and in having the apical segment armed with three short teeth.

Hab. Chili.

74. ANTHIDIUM BILINEOLATUM.

Anthidium bilineolatum, *Spin. Ann. Soc. Ent. Fr.* x. 141. 91 (1841).

Hab. Cayenne.

75. ANTHIDIUM COSTATUM.

Anthidium costatum, *Spin. Ann. Soc. Ent. Fr.* x. 140. 90 (1841).

Hab. Cayenne.

76. ANTHIDIUM DIVARICATUM.

Male. Length 4 lines.—Black, closely punctured; a narrow line traverses the outer orbits of the eyes, and passes along the margin of the vertex; a stripe along the inner orbits of the eyes, a short line at the insertion of each antenna, and the clypeus anteriorly, of a reddish-yellow; at the base of the clypeus are two black dentate spots; the mandibles reddish-yellow. Thorax, a narrow yellow line encircles the disk of the thorax, slightly interrupted on the collar and on the posterior margin of the scutellum; the tegulæ rufo-testaceous, the wings fuscous, palest at their base; the hinder margin of the tubercles and a short line on the breast reddish-yellow; the tibiæ and tarsi ferruginous and having a fuscous stain behind, the apex of the femora more or less ferruginous; the tarsi pubescent, having a fringe of pale hairs behind; a short yellow line on each side of the three basal segments, the fourth having a narrow interrupted line across the middle, the fifth an uninterrupted one, and the sixth entirely yellow, except its apical margin, the seventh yellow at the sides. its margin rounded and entire.

Hab. South America. (Coll. W. W. Saunders, Esq.)

77. ANTHIDIUM FLAVO-PICTUM. B.M.

Male. Length 3½ lines.—Flavo-testaceous, a narrow fuscous line behind the eyes; the region of the ocelli fuscous, terminating posteriorly in a line with the vertex of the eyes; the fuscous stain forms a quadrate shape before the ocelli, passing downwards to the insertion of the antennæ, its inferior margin angulated in the centre; the scape yellow in front, the flagellum ferruginous beyond the third joint, black above. Thorax, the disk black, strongly punc-

tured, encircled by a reddish-yellow border, subinterrupted anteriorly; the tegulæ fulvous, the wings fuscous along their anterior margin, paler posteriorly, the nervures black; legs fulvo-ferruginous, variegated with yellow, the tarsi yellow above. Abdomen fulvo-ferruginous, each segment having a yellow fascia in the middle, the apical segment quadrate, deeply notched in the middle, the notch rounded: beneath, the basal margins of the segments narrowly fuscous, the segments having a yellow fascia; the entire abdomen coarsely punctured.

Hab. Brazil (Santarem).

78. ANTHIDIUM GUTTATUM. B.M.

Anthidium guttatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 227. 20. *St. Farg. Hym.* ii. 382. 28.

Hab. Brazil.

79. ANTHIDIUM LINEOLATUM.

Anthidium lineolatum, *St. Farg. Hym.* ii. 390. 36.

Hab. Brazil.

80. ANTHIDIUM STELOIDES.

Anthidium steloides, *Spin. Faun. Chili,* vi. 182. 3.

Female. Length 4 lines.—Slightly pubescent; antennæ ferruginous, the apex fuscous; head and thorax black, maculated; the abdomen clothed beneath with black pubescence.

Hab. Chili.

81. ANTHIDIUM CHILENSE.

Anthidium chilense, *Spin. Faun. Chili,* vi. 181. 2.

Female. Length 4 lines.—Black, pubescent; antennæ, legs and tegulæ fulvous; thorax black, maculated; the venter clothed with white pubescence; abdomen above shining black, variegated with yellow markings.

Hab. ——?

82. ANTHIDIUM GAYI.

Anthidium Gayi, *Spin. Faun. Chili,* vi. 180. 1.

Female. Length 5 lines.—Antennæ, legs and tegulæ reddish-yellow; the two apical joints of the antennæ fuscous; head and thorax black, immaculate; the abdomen clothed beneath with black pubescence; the abdomen variegated with yellow markings.

Hab. Chili.

83. ANTHIDIUM MACULIFRONS. B.M.

Female. Length 4 lines.—Black, the face has four ovate yellow maculæ, two on the clypeus, and one on each side of it; a stripe on the inferior margin of the mandibles, and a minute spot on the vertex above the eyes, yellow. Thorax, a short stripe over the tegulæ, and four on the margin of the scutellum; a spot on the tegulæ anteriorly, and the tibiæ at their base above, more or less yellow; the thorax, particularly beneath, the face, cheeks and legs have a cinereous pubescence, on the tarsi beneath it is rufo-fuscous; the claws ferruginous. The basal segment of the abdomen has on each side an angular macula and another minute one a little within; the four following segments have on each side, a little within their apical margins, an oblong stripe, pointed within, and deeply emarginate anteriorly, almost dividing the stripes; the apical segment has two central ovate spots, its margin crenulated, and laterally subemarginate; terminating in a short tooth; the ventral scopa yellowish-white.

Hab. United States.

84. ANTHIDIUM JUGATORIUM.

Megachile jugatoria, *Say, Long's Exped. Source St. Peter's River, Append.* p. 83. 3.

Hab. North America (Missouri).

85. ANTHIDIUM INTERRUPTUM.

Megachile interrupta, *Say, Long's Exped. Source St. Peter's River, Append.* 82. 1.

Hab. North America (Missouri).

86. ANTHIDIUM EMARGINATUM.

Megachile emarginata, *Say, Long's Exped. Source St. Peter's River, Append.* p. 83. 2.

Hab. North America (Missouri).

87. ANTHIDIUM NOTATUM. B.M.

Anthidium notatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 231. 23 ♂. *St. Farg. Hym.* ii. 370. 16.

Hab. North America (Carolina).

88. ANTHIDIUM PERPLEXUM. B.M.

Female. Length 4 lines.—Black, the face on each side of the clypeus and a little above the insertion of the antennæ yellow;

an uninterrupted line along the margin of the vertex, an ovate spot a little below the insertion of the antennæ, the scape and four or five basal joints of the flagellum ferruginous. Thorax, the margin ferruginous, interrupted only on the collar and on the posterior margin of the scutellum; the nervures towards the base of the wings, the tubercles and legs ferruginous; the wings dark fuscous. The basal segment of the abdomen ferruginous, having an ovate yellow macula laterally, its posterior margin narrowly black; the second segment has on each side a curved stripe nearly uniting in the middle, the stripes are tinged with ferruginous, the two following segments have on each side a subquadrate macula similarly coloured, the two apical segments black; the ventral scopa yellowish white.

Male.—This sex closely resembles the female, but differs in having the clypeus yellow as well as a spot above and the mandibles also yellow exteriorly. The abdomen has two additional spots on the fifth segment, and all the spots are emarginate at their outer margins, the sixth segment is sub-bituberculate on its apical margin, the seventh is somewhat produced and rounded, and has a slight central carina, its apical margin as well as the extreme lateral margins of all the segments yellow.

Hab. Georgia.

89. ANTHIDIUM CURVATUM. B.M.

Female. Length 4 lines.—Black, the clypeus yellow, having a broad black stripe down the middle, the inner orbits of the eyes nearly to their vertex broadly yellow, a minute yellow spot before the anterior stemma and a transverse yellow line on the vertex continued nearly half-way down the outer margins of the eyes. The collar, tubercles and posterior margin of the scutellum yellow, the former slightly interrupted; the tubercles and legs yellow, the latter varied with ferruginous, the femora being fusco-ferruginous towards their base; the wings smoky, darkest towards their anterior margin. The basal segment of the abdomen has a transverse band, deeply emarginate laterally, the three following segments have on each side an oblong stripe curved downwards and pointed at their extremity within; the curved form being given by a deep notch in the middle of each stripe beneath; the fifth segment has two central oblique stripes, the sixth immaculate.

Hab. Georgia.

90. ANTHIDIUM DORSALE.

Anthidium dorsale, *St. Farg. Hym.* ii. 384. 31.

Hab. North America (Georgia).

91. ANTHIDIUM MACULATUM. B.M.

Male. Length 5 lines.—Black, the entire insect thinly covered with cinereous pubescence; the clypeus, the face on each side, and the mandibles exteriorly of a yellowish-white; also a minute spot on the vertex above the eyes. Thorax, the scutellum has a narrow line on each side of its posterior margin, a spot on the tegulæ in front, and a minute one at the base of the anterior tibiæ above yellow; all the tarsi have a dense white pubescence, and the basal joint of the anterior and posterior pairs is pale yellow. Abdomen, the first to the fifth segment have each four subtriangular yellow spots, the sixth has only two oblique spots, the lateral margins having a curved spine, the seventh is armed with three spines on its apical margin, the central one being the shortest.

Hab. Mexico.

92. ANTHIDIUM RUFIVENTRE.

Anthidium rufiventre, *Latr. Ann. Mus. Hist. Nat.* xiii. 234. 26.

Hab. ——?

93. ANTHIDIUM QUADRILOBUM.

Anthidium quadrilobum, *St. Farg. Hym.* ii. 401. 47.

Hab. ——?

94. ANTHIDIUM PRODUCTUM.

Anthidium productum, *St. Farg. Hym.* ii. 400. 46.

Hab. ——?

95. ANTHIDIUM OBTUSATUM.

Anthidium obtusatum, *St. Farg. Hym.* ii. 362. 9 ♂.

Hab. ——?

96. ANTHIDIUM LEPELLETIERI.

Anthidium Lepelletieri, *Fons. Ann. Soc. Ent. Fr.* 2 sér. iv. 43. 4.

Hab. ——?

97. ANTHIDIUM MARGINATUM.

Anthidium marginatum, *Latr. Ann. Mus. Hist. Nat.* xiii. 218. 9. pl. 1. f. 3.
St. Farg. Hym. ii. 383. 30.

Hab. ——?

98. ANTHIDIUM DISSECTUM.

Anthidium dissectum, *Eversm. Bull. Mosc.* xxv. 80. 2.

Hab. Russia.

99. ANTHIDIUM REGULARE.

Anthidium regulare, *Eversm. Bull. Mosc.* xxv. 80. 3.

Hab. Russia.

100. ANTHIDIUM NIGRIPES.

Anthidium nigripes, *H. Schäff. Nom. Ent.* p. 70.
Eversm. Bull. Mosc. xxv. 81. 5.

Hab. Russia.

101. ANTHIDIUM AURIPES.

Anthidium auripes, *Eversm. Bull. Mosc.* xxv. 82. 6.

Hab. Russia.

102. ANTHIDIUM INTEGRUM.

Anthidium integrum, *Eversm. Bull. Mosc.* xxv. 83. 8.

Hab. Russia.

103. ANTHIDIUM SENILE.

Anthidium senile, *Eversm. Bull. Mosc.* xxv. 83. 9.

Hab. Russia.

104. ANTHIDIUM FLORIPETUM.

Anthidium floripetum, *Eversm. Bull. Mosc.* xxv. 83. 10.

Hab. Russia.

105. ANTHIDIUM REPTANS.

Anthidium reptans, *Eversm. Bull. Mosc.* xxv. 85. 13.

Hab. Russia.

106. ANTHIDIUM SIBIRICUM.

Anthidium sibiricum, *Eversm. Bull. Mosc.* xxv. 85. 14.

Hab. Russia.

Genus 15. SERAPIS, n. g.

Serapis, *F. Smith's MSS.* (Details, Plate IX.)

Head about the width of the thorax, the ocelli placed in a curve on the vertex; the maxillary palpi two-jointed, the basal joint short, much wider than the second, but not more than half the length; the second joint cylindric and furnished at its apex with two stout setæ, which are about two-thirds the length of the joint; labial palpi four-jointed, the two basal joints elongate, the two apical ones minute; the labrum elongate, truncate at the apex. The anterior wings having one marginal and two submarginal cells, the former about the length of the two latter; the first submarginal cell receiving the first recurrent nervure about one-fifth distant from its apex; the second recurrent nervure uniting with the second transverse cubital nervure; the abdomen furnished beneath with a dense scopa.

1. SERAPIS DENTICULATUS. B.M.

Female. Length 5 lines.—Black, the face and cheeks densely covered with white pubescence, on the vertex it is more thinly scattered; the mandibles slightly bent and armed at their apex with a long acute tooth, on the inner margin are four short acute teeth, the basal one stoutest. Thorax, in front, on the sides and beneath, densely clothed with white pubescence; two small tufts of snow-white pubescence on the prothorax, one on the tegulæ posteriorly, and two at the base of the scutellum; the posterior tibiæ at their base and apex are spotted with white pubescence, the scutellum very broad, slightly produced over the base of the abdomen, the thorax on each side of the scutellum produced into an acute angle. Abdomen, the basal segment has on each side a tuft of white pubescence, the four following segments have laterally a short fascia of snow-white pubescence, the sixth having an ovate spot, and in the centre a slightly elevated carina; the apical margin transverse, slightly produced in the middle; all the segments except the basal one produced at its lateral angles into a short stout acute tooth; the scopa beneath dense, fulvous in the middle and white at the sides.

Male.—This sex closely resembles the female, but has the clypeus and mandibles yellow, the latter edentate, acute at their apex; the pubescence on the face and disk of the thorax slightly ochraceous; the outer margin of the tegulæ and scutellum testaceous, the apical margins of the segments of the abdomen rufo-testaceous; the seventh segment armed laterally with an elongate stout acute spine, the spines grooved exteriorly; also a central

spine slender and acute, shorter than the lateral spines, continued upwards as a carina to the base of the segment.

Hab. Interior of South Africa. (Presented by the Earl of Derby.)

Genus 16. CHELOSTOMA.

Apis, pt., *Linn. Faun. Suec.* 419 (1761).
Hylæus, pt., *Fabr. Ent. Syst.* ii. 302 (1793).
Anthophora, pt., *Fabr. Syst. Piez.* 372 (1804).
Chelostoma, *Latr. Gen. Crust. Ins.* iv. 161 (1809).
Heriades, pt., *Spin. Ins. Ligur.* fasc. ii. 9 (1808).

The labial palpi 4-jointed, the basal joint about one-third the length of the second, the third joint in a line with the second, the fourth placed at the side and near the apex of the third joint. The maxillary palpi 3-jointed, the joints minute and subovate.

1. CHELOSTOMA FLORISOMNE. B.M.

Apis florisomnis, *Linn. Faun. Suec.* 1704 ♂, and *Cab. Mus. Linn. Soc.*
Scop. Ent. Carn. p. 299. 796. f. 796.
Fabr. Syst. Ent. p. 387. 55.
Kirby, Mon. Ap. Angl. ii. 253. 49.
Apis maxillosa, *Linn. Syst. Nat.* i. 954. 11 ♀, and *Cab. Mus. Linn. Soc.*
Fabr. Mantis. i. 305. 86.
Kirby, Mon. Ap. Angl. ii. 251. 48.
Hylæus florisomnis, *Fabr. Ent. Syst.* ii. 304. 5 ♂.
Panz. Faun. Germ. 46. 13; *Syst. Piez.* p. 319. 3.
Hylæus maxillosus, *Fabr. Ent. Syst.* ii. 303. 4 ♀.
Panz. Faun. Germ. 53. 17.
Anthophora truncorum, *Fabr. Syst. Piez.* 379. 29. var. β ♀.
Megachile maxillosa, *Latr. Hist. Nat.* xiv. 51. 1 ♂ ♀.
Megachile florisomnis, *Spin. Ins. Lig.* fasc. i. 134. 1.
Chelostoma maxillosa, *Latr. Gen. Crust. et Ins.* iv. 162.
Brullé, Expéd. Sc. Morée, iii. 342. 757.
Blanch. Hist. Nat. Ins. iii. 409.
St. Farg. Hym. ii. 407. 1.
Chelostoma florisomnis, *Curtis, Brit. Ent.* xiv. t. 628 ♂.
Smith, Zool. iv. 1445. 1.
Heriades maxillosa, *Zett. Ins. Lapp.* 467. 2.
Nyland. Ap. Boreal. p. 268. 1; *Revis. Ap. Boreal.* p. 277. 2.
Chelostoma florisomne, *Eversm. Bull. Mosc.* xv. 74. 3.

Hab. Britain; France; Germany; Morea; Denmark; Russia; Sweden; Finland; Lapland.

2. CHELOSTOMA NIGRICORNE. B.M.

Heriades nigricornis, *Nyland. Ap. Boreal.* p. 269. 2.

Hab. France; Switzerland; Denmark; Sweden; Finland.

3. CHELOSTOMA GRANDE.

Heriades grandis, *Nyland. Revis. Ap. Boreal.* p. 277. 1.

Hab. Switzerland.

4. CHELOSTOMA CULMORUM.

Heriades culmorum, *St. Farg. Hym.* ii. 408. 2 (*var.* H. florisomnis ?).

Hab. France (Paris).

5. CHELOSTOMA CAMPANULARUM. B.M.

Apis Campanularum, *Kirby, Mon. Ap. Angl.* i. 256. 50. t. 16. f. 14 ♀. 15 ♂.
Megachile Campanularum, *Latr. Hist. Nat.* xiv. 52. 2.
Heriades Campanularum, *Spin. Ins. Lig.* fasc. iii. 198. 1.
St. Farg. Hym. 405. 2.
Smith, Zool. iv. 1448. 2.
Nyland. Ap. Boreal. p. 273. 6.
Apis florisomnis minima, *Christ. Hym.* 197. t. 17. f. 18.
Chelostoma campanularum, *Eversm. Bull. Mosc.* xxv. 75. 4.

Hab. Britain; France; Italy; Germany; Russia; Denmark; Sweden and Finland.

6. CHELOSTOMA ROBUSTUM.

Heriades robusta, *Nyland. Ap. Boreal.* p. 270. 3.

Hab. Finland.

7. CHELOSTOMA ALBIFRONS.

Chelostoma albifrons, *Kirby, Faun. Boreal. Amer.* p. 270. 1.

Hab. N. America.

8. CHELOSTOMA RUGIFRONS. B.M.

Female. Length 5 lines.—Black, the head strongly punctured; the face has some white pubescence on each side at the insertion of the antennæ; the mandibles very stout, having a tooth near their base within, their apex tridentate, the middle tooth minute, longitudinally grooved above. Thorax strongly punctured; its pubescence, as well as that of the legs, white, the claw-joint rufo-

testaceous, the tarsi beneath fulvous, the wings subhyaline, the nervures black. Abdomen cylindric, shining and strongly punctured; the basal and apical margins depressed; the first and three following segments have very narrow fasciæ of white pubescence, which is rather wider at the lateral margins; the fasciæ cross the segments about one-third within, curving backwards to the lateral apical margins, the sixth segment covered with white pubescence at the base; beneath densely clothed with white pubescence.

Hab. Georgia.

9. CHELOSTOMA SIGNATUM.

Chelostoma signatum, *Eversm. Bull. Mosc.* xxv. 73. 1 (1852).

Hab. Russia.

10. CHELOSTOMA INERME.

Chelostoma inerme, *Schäff. Nom. Ent.* p. 98.
Eversm. Bull. Mosc. xxv. 74. 2.

Hab. Russia.

Genus 17. HERIADES.

Apis, pt., *Linn. Faun. Suec.* 419; *Syst. Nat.* i. 954. 11 (1761).
Hylæus, pt., *Fabr. Ent. Syst.* ii. 302 (1793).
Anthophora, pt., *Fabr. Syst. Piez.* p. 372 (1804).
Megachile, pt., *Latr. Hist. Nat.* xiv. 52. sec. 2 (1805).
Heriades, pt., *Spin. Ins. Lig.* fasc. ii. 8 (1808).
Chelostoma and Heriades, *Latr. Gen. Crust. et Ins.* iv. 161 (1809).

The labial palpi 4-jointed, the basal joint not quite half the length of the second, the third and fourth minute, placed at the side and near the apex of the second joint. The maxillary palpi 3-jointed, the two basal joints short and stout, the apical joint slender, cylindric and pointed at the apex.

1. HERIADES TRUNCORUM. B.M.

Apis truncorum, *Linn. Faun. Suec.* 1692; *Syst. Nat.* i. 955. 15, and *Cab. Mus. Linn. Soc.*
Kirby, Mon. Ap. Angl. ii. 258. 51.
Hylæus truncorum, *Fabr. Ent. Syst.* ii. 305. 9.
Panz. Faun. Germ. 64. 15.
Anthophora truncorum, *Fabr. Syst. Piez.* p. 379. 29.
Megachile truncorum, *Latr. Hist. Nat.* xiv. 52. 3.
Spin. Ins. Lig. fasc. 2. p. 9.

Heriades truncorum, *Spin. Ins. Lig.* fasc. 2. p. 9.
Curtis, Brit. Ent. xi. tab. 504.
St. Farg. Hym. ii. 405. 2.
Blanch. Hist. Nat. Ins. iii. 408.
Zett. Ins. Lapp. p. 467. 1.
Smith, Zool. iv. 1447. 1.
Nyland. Ap. Boreal. p. 271. 4; *Revis. Ap. Boreal.* p. 278.

Hab. Britain; France; Italy; Germany; Sweden; Finland; Lapland.

Genus 18. CERATINA.

Hylæus, pt., *Fabr. Ent. Syst.* ii. 302 (1793).
Apis, pt., *Fabr. Ent. Syst. Supp.* 273 (1796).
Megilla, pt., *Fabr. Syst. Piez.* 328 (1804).
Prosopis, pt., *Fabr. Syst. Piez.* 293 (1804).
Ceratina, *Latr. Hist. Nat.* xiv. 50 (1805).

The labial palpi four-jointed, the two basal joints elongate, the two apical ones minute, situated near the apex of the second joint at the side; the maxillary palpi six-jointed, the three basal joints of about equal length, subclavate, the three apical ones minute; the superior wings having one marginal and three submarginal cells. Claws of the tarsi bifid. The labial palpi are four-jointed.

Latreille and St. Fargeau only observed three joints to the labial palpi; the maxillary palpi are also incorrectly figured in the 'Exploration Scientifique de l'Algérie.'

1. CERATINA CÆRULEA. B.M.

Apis cærulea, *Vill. Ent. Europ.* iii. 88. t. 8. f. 25 ♂.
Apis cucurbitina, *Rossi, Mant.* i. 145. 325.
Apis callosa, *Fabr. Ent. Syst. Supp.* 277. 122–3.
Apis cyanea, *Kirby, Mon. Ap. Angl.* ii. 308. 71. t. 17. f. 7 ♀. 8 ♂.
Ceratina callosa, *Latr. Gen. Crust. Ins.* iv. 160.
St. Farg. & Serv. Encycl. Méth. x. 18. 1.
Blanch. Hist. Nat. Ins. iii. 409.
Eversm. Bull. Mosc. xxv. 88. 1.
Ceratina albilabris, *Latr. Hist. Nat.* xiv. 50.
Spin. Ins. Lig. i. 151. 1 ♀.
Megilla callosa, *Fabr. Syst. Piez.* 328. 31.
Ceratina nitidula, *Spin. Ins. Lig.* 151. 2 ♂; ii. *App.* 80.
Ceratina cyanea, *St. Farg. Hym.* ii. 505. 1.
Ceratina cærulea, *Smith, Zool.* iv. 1448. 1.
Dufour, Ann. Soc. Ent. Fr. ix. (1840) p. 15. 5.

Hab. Britain; France; Italy; Russia.

2. CERATINA ALBILABRIS. B.M.

Hylæus albilabris, *Fabr. Ent. Syst.* ii. 305. 10.
Prosopis albilabris, *Fabr. Syst. Piez.* 293. 2.
Ceratina callosa, *Latr. Gen. Crust. et Ins.* tab. 14. fig. 11.
Ceratina albilabris, *Jurine, Hym.* 234.
Germar, Faun. Ins. Europ. fasc. 5. f. 17.
St. Farg. Hym. ii. 506. 2. exclus. syn.
Smith, Zool. App. vii. 57.
Dufour, Ann. Soc. Ent. Fr. ix. (1840) 16.
Lucas, Explo. Sc. Algér. iii. 223. 171.

Hab. Britain?; France; Italy; Algeria.

3. CERATINA ÆNEA. B.M.

Ceratina ænea, *Brullé, Expéd. Sc. Morée,* iii. 341. 756. pl. 48. f. 10 ♂.

The female resembles the male, differing only in having a minute spot on the clypeus and in wanting the spine on the second ventral plate of the abdomen.

Hab. The Morea; Albania.

4. CERATINA DECOLORANS.

Ceratina decolorans, *Brullé, Expéd. Sc. Morée,* iii. 340. 755. pl. 48. f. 9.

Hab. The Morea.

5. CERATINA PARVULA.

Female. Length 1½ line.—Black, head polished, smooth and shining, the clypeus on each side anteriorly stained with yellow, mandibles pale ferruginous, the antennæ testaceous beneath. Thorax smooth and shining, wings hyaline, iridescent, the nervures pale testaceous, the tegulæ testaceous; the legs rufo-testaceous, the tarsi pale; the apical margins of the segments of the abdomen testaceous, the abdomen is delicately punctured, the two apical segments more strongly so, and having scattered pale hairs; beneath testaceous.

Hab. Albania. (In Coll. W. W. Saunders, Esq.)

6. CERATINA MAURITANICA. B.M.

Ceratina mauritanica, *St. Farg. Hym.* ii. 507. 3.
Lucas, Explo. Sc. Algér. iii. 223. 172. t. 10. f. 10.

Hab. Algeria (Oran).

7. CERATINA SUBQUADRATA. B.M.

Female. Length 3¼ lines.—Black, the face coarsely punctured, the cheeks and mandibles smooth and shining; the clypeus truncate, not produced beyond the base of the mandibles and having an oblong cream-coloured stripe; the margin of the vertex rounded behind, giving the head a subquadrate form. Thorax, the tubercles and a line in front at the base of the anterior tibiæ white, the intermediate and posterior legs wanting. Abdomen much narrowed towards the base, the apical margins of the three basal segments smooth and shining, and having a transverse impressed line, the three apical segments roughened.

Hab. South Africa.

8. CERATINA ARMATA.

Female. Length 3½ lines.—Black, closely and strongly punctured; the clypeus has a central yellow groove, the punctures running irregularly into lines; the labrum and mandibles are similarly sculptured. Thorax, the tubercles and a minute spot at the base of the tibiæ above, yellow; the metathorax opake, very finely punctured; the wings fusco-hyaline, darkest at their apical margins; the legs dark rufo-testaceous, fringed with a pale glittering pubescence; that on the tarsi dense and pale fulvous; the claws ferruginous, the calcaria pale testaceous, the posterior tibiæ armed in the middle exteriorly with a sharp stout spine. Abdomen, the basal segment depressed above, smooth, shining and finely punctured, on the fourth, fifth and sixth segments the punctures run into lines, the apical segment has a central raised carina; beneath, covered with strong elongate punctures.

Hab. Cape of Good Hope. (Coll. Fred. Smith.)

9. CERATINA VIRIDIS. B.M.

Ceratina viridis, *Guér. Icon. R. An. Ins.* 444. t. 73. f. 6.
(Var. *a.* of a rich coppery green.)

Hab. Bengal; Ceylon; China.

10. CERATINA PICTA. B.M.

Female. Length 3 lines.—Head and thorax black, smooth and shining; a line on the cheeks, a narrow one along the inner orbits of the eyes suddenly broadly expanded on each side of the clypeus, two short oblique lines meeting in front of the stemmata, a triangular spot at the base of the clypeus and a transverse line on its anterior margin, yellow; from the latter two very

narrow abbreviated lines run from the centre; the mandibles have also a yellow spot at their base; the labrum ferruginous. Thorax, except the disk which is shining and impunctate, closely punctured; the disk has two narrow parallel lines not reaching the collar or the base of the scutellum, a short narrow line over the tegulæ, a dot on the collar laterally, the tubercles and the middle of the scutellum, yellow; the wings fusco-hyaline, the nervures fuscous; a transverse curved line on each side of the pectus, and a short one in front of each intermediate coxa; the legs reddish-yellow, the femora and coxæ more or less stained with fuscous. Abdomen entirely ferruginous.

Hab. Ceylon.

11. Ceratina similima. B.M.

Male. Length 2¼ lines.—Black, a trilobate spot on the clypeus, a transverse stripe above, widest in the middle; the inner margins of the eyes as high as the insertion of the antennæ, above each of which is a minute oblique spot, and behind the eyes towards their vertex an oblique cream-coloured stripe. The thorax has a lunate spot on the scutellum, two narrow stripes on the disk, a minute spot over the tegulæ, the collar and tubercles cream-coloured; the legs testaceous, the apex of the femora, the tibiæ and tarsi yellowish-white; the apical margins of the segments have narrow white fasciæ, interrupted in the middle, that on the basal segment waved; the abdomen beneath testaceous at the base.

Hab. East Indies.

12. Ceratina sculpturata.

Female. Length 4 lines.—Black, closely and deeply punctured; head, the clypeus has a transverse lunate yellow spot, and a similar yellow spot is situated on the face on each side; the punctures run into lines on the clypeus, those on the vertex are very large and deeply impressed; the mandibles have a triangular yellow spot at their base. Thorax, the disk shining, the metathorax opake, very closely and finely punctured, the wings fuscous, their tegulæ testaceous, their outer margins pale; the legs have a fringe of pale pubescence beneath; the tarsi are densely covered with a glittering pale yellow pubescence, the claws and the apical joints ferruginous. The apical segments of the abdomen rugose; beneath, covered with a short griseous pubescence.

Hab. Senegal. (Coll. Fred. Smith.)

13. CERATINA HIEROGLYPHICA. B.M.

Female. Length 3–4 lines.—Black, a T-shaped mark on the clypeus, a transverse line above, two spots above the insertion of the antennæ, and an abbreviated line on the inner and outer margin of the eyes, yellow. Thorax, a lunate spot on the scutellum, two abbreviated lines on the mesothorax, an epaulet over the tegulæ, the collar and tubercles yellow; the tibiæ above and the tarsi yellow, the latter stained with ferruginous; the segments of the abdomen have a transverse yellow band not quite touching the apical margins, the bands attenuated on each side, and towards the extreme lateral margins they are suddenly widened, the basal segment has a central spot and one on each side, the three united by two narrow curved lines; sometimes the basal segment has a transverse yellow line, which has two black spots; the apical segment black; beneath, the margins of the segments are narrowly testaceous, and ciliated with pale hairs.

The male closely resembling the female, the yellow markings being broader, the scape of the antennæ in front, the labrum and anterior femora are also yellow, the margins of the abdominal segments beneath are more broadly testaceous; the entire insect closely and rather strongly punctured, the disk of the thorax and the region of the insertion of the antennæ polished and sparingly punctured.

Hab. Northern India; Hong Kong; Philippine Islands.

14. CERATINA MACULATA.

Male. Length 3 lines.—Green, closely and strongly punctured, the clypeus and a circular spot on the labrum cream-coloured; the antennæ and mandibles black. Thorax, the tubercles and a line on the anterior femora beneath and on the tibiæ in front, another at the base of the posterior tibiæ above, yellow; the tarsi rufo-testaceous; the wings subhyaline, the tegulæ and nervures rufo-testaceous. Abdomen, the basal margins of all the segments and a large lunate spot on each side of the fourth, fifth and sixth segments black, the three basal segments have on each side a minute black spot; the seventh segment has a central raised carina, produced at the apex into an obtuse spine.

Hab. Java. (Coll. W. W. Saunders, Esq.)

15. CERATINA SMARAGDINA.

Female. Length 4 lines.—Brilliant green, closely and strongly punctured; the antennæ, anterior margin of the clypeus, the labrum and mandibles black; the labrum on each side and the

mandibles at their base tinged with green. Thorax, the disk smooth and having a few large scattered punctures and four abbreviated longitudinal impressed lines, the wings fusco-hyaline; the posterior tibiæ and all the tarsi have a long thin griseous pubescence, that on the tarsi beneath is pale fulvous; the claws ferruginous. Abdomen of a blue-green in certain lights, the three apical segments rugose.

Hab. Java. (Coll. W. W. Saunders, Esq.)

16. CERATINA DUPLA. B.M.

Ceratina dupla, *Say, Bost. Journ. Nat. Hist.* i. 397.

Hab. Indiana, U. States; St. John's Bluff, East Florida. (E. Doubleday, Esq.)

17. CERATINA LÆTA. B.M.

Ceratina læta, *Spin. Ann. Soc. Ent. Fr.* x. 138. 87 (1841).

Hab. Cayenne; Brazil (Ega).

18. CERATINA CHALCEA.

Ceratina chalcea, *Spin. Ann. Soc. Ent. Fr.* x. 139. 88 (1841).

Hab. Cayenne.

19. CERATINA PUNCTULATA.

Ceratina punctulata, *Spin. Ann. Soc. Ent. Fr.* x. 139. 89 (1841).

Hab. Cayenne.

20. CERATINA LUCIDULA. B.M.

Female. Length 1½ line.—Olive-green, very bright and shining, the two basal joints of the antennæ pale testaceous, the flagellum rufo-fuscous; the mandibles, labrum and anterior margin of the clypeus pale yellow-testaceous. The disk of the thorax very smooth and shining, anteriorly are a few scattered large punctures; the scutellum has also some coarse punctures, the metathorax closely and finely punctured; the tegulæ pale yellow-testaceous, the legs of the same colour, the wings hyaline, the stigma fuscous; the abdomen has a short scattered pale pubescence, and is somewhat coarsely punctured towards the apex.

Hab. Santarem (Brazil). (Coll. W. W. Bates, Esq.)

21. CERATINA MACULIFRONS.

Female. Length 4 lines.—Olive-green, closely and strongly punctured, a spot on the clypeus touching its anterior margin,

and two on the face on each side of the clypeus touching the margin of the eyes, yellow; an elongate yellow stripe behind the eyes; antennæ, labrum and mandibles black. Thorax, the anterior femora at their apex above, and all the tibiæ at their base yellow; the posterior tibiæ have a short spine near their base exteriorly; the posterior tibiæ and all the tarsi densely covered with cinereous pubescence, the claws and apical joints of the tarsi ferruginous; the metathorax on each side covered with white pubescence; abdomen, the margins of the three basal segments depressed, smooth and shining, the three apical ones rugose.

Hab. Brazil. (Coll. Fred. Smith.)

Genus 19. ALLODAPE.

Allodape, *St. Farg. Hym.* ii. 531.

Maxillary palpi six-jointed, the basal joint thickest, nearly as long as the two following, the three apical ones minute, the labial palpi four-jointed, the two basal ones elongate, the apical ones minute; the superior wings having one marginal and two submarginal cells.

In the 'Encyclopédie Méthodique,' and also in St. Fargeau's 'Hymenoptera,' the number of joints in the maxillary palpi is incorrectly given; it has therefore been necessary to give the above short correction.

1. ALLODAPE RUFOGASTRA. B.M.

Allodape rufogastra, *St. Farg. Ency. Méth.* x. 119. 1; *Hym.* ii. 531. 1 ♀.
Blanch. Hist. Nat. Ins. iii. 412.

The male closely resembles the female, but has the clypeus entirely yellow; the abdomen is black at its extreme base as well as the four apical segments, except the base of the fourth; the apical segment is obtuse and fringed with curled fulvous pubescence.

Hab. South Africa. (Coll. the Rev. D. F. Morgan.)

2. ALLODAPE PICTIFRONS. B.M.

Female. Length 3¼ lines.—Black, a narrow yellow stripe along the inner margins of the eyes, and another down the middle of the clypeus, which is produced and rounded at its anterior margin; the face on each side above the clypeus depressed, as in the genus *Cerutina*, the antennæ inserted in the depressions, between which is a raised carina running from the clypeus to the

anterior stemma, where it divides and partly encloses it; the head is shining and strongly punctured. Thorax smooth and shining on the disk, very delicately punctured, interspersed with larger punctures, particularly the scutellum and sides of the thorax; wings subhyaline, the nervures fuscous; the legs have a pale glittering pubescence, that on the tarsi, which is dense, slightly yellow; the posterior tibiæ towards their apex in front and the claw-joint of the tarsi ferruginous. Abdomen shining, delicately punctured, and covered with shallow rough sculpturing, particularly the three apical segments; the entire margins of the segments narrowly rufo-testaceous.

Hab. Sierra Leone. (Coll. the Rev. D. F. Morgan.)

This species sometimes has a yellow transverse line on the scutellum, more or less frequently entirely obsolete.

3. ALLODAPE SIMILLIMA. B.M.

Female. Length 3¼ lines.—Black, very closely resembling *A. pictifrons*; the clypeus is, however, more produced, and has a broad pear-shaped yellow spot extending from its base to the apex; the thorax is similarly sculptured; the base of the wings and outer margins of the tegulæ are pale testaceous, the wings hyaline, the second submarginal cell narrowed towards the marginal, more angulated than in *A. pictifrons*, but the abdomen is of the same form and colour, and is similarly sculptured.

Hab. Australia (Macintyre River). (Coll. — Ker, Esq.)

4. ALLODAPE FOVEATA. B.M.

Female. Length 4 lines.—Black, shining and punctured, the clypeus pale yellow. Thorax, the disk smooth and very delicately punctured, the metathorax fringed on each side with silvery glittering hairs; the tegulæ rufo-testaceous, the nervures ferruginous; the posterior tibiæ and all the tarsi clothed with a glittering pale pubescence, the claw-joints ferruginous; the calcaria pale testaceous. Abdomen oblong, narrowest at the base, which has a deep fovea, the apex acute; delicately punctured and interspersed with larger punctures, most closely so towards the apex; the margins of the segments narrowly testaceous. Beneath, the thorax is thinly covered with griseous pubescence, the margins of the segments are fringed with pubescence of the same colour.

Hab. Sierra Leone. (Coll. the Rev. D. F. Morgan.)

5. ALLODAPE VARIEGATA. B.M.

Female. Length 3 lines.—Head and thorax black, smooth

and shining, the clypeus and labrum yellow-testaceous, the mandibles ferruginous towards the apex; the scape ferruginous in front, the face depressed, an elevated carina passing between the antennæ from the clypeus to the anterior stemma. The disk of the thorax glossy, thinly scattered over with pale hairs, and having a central impressed line passing from the collar to the middle of the mesothorax, also a shorter line on each side; the collar and scutellum yellow; the tegulæ, extreme base of the wings and the nervures testaceous, the wings hyaline and beautifully iridescent; the legs pale rufo-testaceous, having the coxæ, trochanters and base of the femora black, the two former pale testaceous at their extreme apex; the posterior legs have a long pale glittering pubescence. The abdomen oblong, rufo-testaceous; the basal segment has a central depression, the apical segments are dark fuscous and the sides of the anterior segments are spotted with the same colour, the two apical segments covered with short white hairs; the apex acute; beneath, pale rufo-testaceous.

Hab. Port Natal. (Coll. R. H. Plant.)

6. ALLODAPE UNICOLOR. B.M.

Female. Length $2\frac{1}{4}$ lines.—Black and shining, the clypeus having an elongate cream-coloured spot, transverse at the base and pointed at the apex of the clypeus. The metathorax delicately punctured, the wings hyaline, their extreme base yellowish, the nervures fuscous; the posterior legs and all the tarsi thinly covered with pale glittering pubescence, the claws testaceous; abdomen very delicately transversely aciculate, the apical segments rugose; the apex of the abdomen acute.

Hab. New Holland.

7. ALLODAPE MARGINATA. B.M.

Female. Length $2\frac{1}{4}$ lines.—Black, the clypeus cream-coloured, the labrum, apex of the mandibles and antennæ beneath ferruginous. Thorax, the disk smooth and shining, the scutellum and metathorax delicately punctured; the tubercles, tegulæ and base of the wings of a pale testaceous-yellow; the wings hyaline and iridescent, the nervures pale ferruginous; the posterior legs and the tarsi covered with a glittering pale pubescence, the apical joints of the tarsi and the calcaria pale testaceous. Abdomen oblong, acute at the apex, towards which it is roughened; the margins of all the segments narrowly pale testaceous.

Hab. East Indies?

8. ALLODAPE MUCRONATA.

Female. Length 6 lines.—Black, the head shining, strongly punctured; a narrow short yellow line along the inner margin of the eyes; on the lower part of the face parallel with the sides of the clypeus is a raised carina which reaches the base of the mandibles; the clypeus somewhat produced, covered as well as the labrum with coarse punctures; on each side of the stemmata on the vertex are some deep shining depressions, and a narrow yellow stripe along the hinder margins of the eyes. Thorax, the disk very smooth and shining, the prothorax coarsely punctured; the sides of the thorax have a thin pale fulvous pubescence, the tubercles having a thick fringe of the same behind; the posterior tibiæ and all the tarsi densely covered with pale fulvous pubescence, the legs being dark rufo-testaceous, the tegulæ are of the same colour, the wings subhyaline, the metathorax rounded and delicately and closely punctured. Abdomen shining, strongly punctured, of a dark rufo-testaceous colour above, beneath much paler and varied with dark stains, very smooth and shining, the apical portion of the segments punctured; above is a short, thin griseous pubescence, the margins of the segments being pale testaceous; the apical segment terminating in a sharp mucro, on each side of which the margin is angulated; the abdomen is recurved and somewhat concave towards the apex.

Hab. Cape of Good Hope. (Coll. Fred. Smith.)

9. ALLODAPE PICTA. B.M.

Male. Length 2½ lines.—Black, antennæ pale fulvous beneath, fuscous above, the apical joint dilated and compressed; the clypeus and the face on each side yellow, a narrow yellow line along the inner margin of the eyes; the mandibles and labrum of a testaceous-yellow. Thorax impunctate, the metathorax rounded behind; the tegulæ testaceous, wings hyaline, the nervures testaceous; the legs rufo-testaceous, the anterior and intermediate tibiæ yellow in front. Abdomen smooth and shining, the second, third and fourth segments have on each side at their basal margins a transverse yellow spot; the apex of the abdomen acute.

Hab. Australia.

10. ALLODAPE PANURGOIDES. B.M.

Female. Length 4 lines.—Black and shining, the face closely and strongly punctured; a narrow line on the clypeus and another close to the eyes yellow; the cheeks very smooth and shining, the punctures scattered; the flagellum rufo-testaceous beneath.

Thorax, the disk smooth and shining, having a central impressed line and two on each side; the wings fusco-hyaline, the tegulæ testaceous, the nervures ferruginous. The posterior tibiæ and all the tarsi clothed with short bright fulvous pubescence, the claws ferruginous. Abdomen covered with strong elongate punctures, most dense towards the apex.

Hab. South Africa. (Coll. the Rev. D. F. Morgan.)

Genus 20. EXONEURA, n. g.

(F. Smith's MSS.)

Head transverse, ocelli placed in a triangle on the vertex; the labrum obtuse at the apex, about the same length as the mentum; the labial palpi four-jointed, the two basal joints elongate, about equal in length, the two apical ones minute; the maxillary palpi six-jointed. The superior wings having one marginal and two submarginal cells; the first recurrent nervure received by the second submarginal cell, the second recurrent nervure and third discoidal cell obsolete; the posterior tibiæ having a thin scopa of pubescence; the claws of the tarsi bifid.

1. EXONEURA BICOLOR. B.M.

Female. Length 3 lines.—Head and thorax black, smooth and shining; the face delicately punctured, the ocelli very bright and glassy; the scape of the antennæ in front and a line down the clypeus pale yellow-testaceous; the labrum and mandibles rufo-testaceous, the latter black at their base and apex. Thorax impunctate, the metathorax rounded, the margins of the tegulæ rufo-testaceous, the nervures of the wings ferruginous, palest towards the base of the wings, which are fulvo-hyaline; the legs ferruginous, the coxæ, trochanters and base of the femora black; the posterior tibiæ and all the tarsi clothed with a glittering pale fulvous pubescence, that on the former stained with fuscous above. Abdomen ferruginous, subclavate; the basal segment has a central depression, which is black; the two apical segments very finely transversely reticulate, intermixed with punctures; the apex acute.

Var. B. The posterior femora and tibiæ black, except their base and apex; the basal and second segment more or less stained with fuscous.

Hab. Australia (Swan River); Van Diemen's Land.

Subfam. 3. DENUDATÆ.

Genus 21. NOMADA.

Apis, pt., *Linn. Syst. Nat.* i. 953 (1766).
Nomada, pt., *Fabr. Ent. Syst.* ii. 345 (1793).

1. NOMADA ALTERNATA. B.M.

Apis Marshamella, *Kirby, Mon. Ap. Angl.* ii. 188. 10 ♀, et *Cab. Mus. Ent. Soc.*
Apis alternata, *Kirby, Mon. Ap. Angl.* ii. 182. 5 ♂, et *Cab. Mus. Ent. Soc.*
Nomada Marshamella, *Schäff. Germ. Zeits.* i. 285. 25.
Smith, Zool. ii. 590. 3.
Eversm. Bull. Mosc. xxv. 92. 2.

Hab. Britain; France; Germany.

2. NOMADA ANNULARIS.

Nomada annularis, *St. Farg. Ency. Méth.* viii. 366. 9.

Hab. France.

3. NOMADA ATRA.

Nomada atra, *Smith, Zool.* iv. 1568.

Hab. Britain.

4. NOMADA ARMATA. B.M.

Nomada armata, *Schäff. Germ. Zeits.* i. 279. 10.
Smith, Zool. vii. *App.* 41.
Nomada Kirbii, *Steph. Ill. Brit. Ent. Mand.* vii. t. 41.
Nomada cincticornis, *Nyland. Ap. Boreal.* 182. 12.

Hab. Britain; Germany; Albania; Denmark; Sweden; Finland.

5. NOMADA AGRESTIS. B.M.

Nomada agrestis, *Fabr. Ent. Syst.* ii. 347; *Syst. Piez.* p. 390. 1.
St. Farg. Hym. ii. 467. 4; *Ency. Méth.* viii. 364. 1.
Lucas, Explo. Sc. Algér. iii. 218. t. 10. f. 3.

Hab. Spain; Portugal; Algeria.

6. NOMADA BACCATA. B.M.

Nomada baccata, *Smith, Zool.* ii. 604. 20 ♂ ♀.
Nyland. Revis. Ap. Boreal. p. 230.

Hab. Britain.

7. NOMADA BOREALIS. B.M.

Nomada borealis, *Zett. Ins. Lapp.* p. 470. 1 ♀.
Nyland. Ap. Boreal. p. 181. 11.
Nomada inquilina, *Smith, Zool.* ii. 605. 21 ♂ ♀.

Hab. Britain; Denmark; Sweden; Finland; Lapland.

8. NOMADA FLAVOGUTTATA. B.M.

Apis flavoguttata, *Kirby, Mon. Ap. Angl.* ii. 215. 31 ♂, et *Cab. Mus. Ent. Soc.*
Nomada flavoguttata, *Smith, Zool.* ii. 598. 12 ♂ ♀.

Hab. Britain.

9. NOMADA FABRICIANA. B.M.

Apis Fabriciana, *Linn. Syst. Nat.* i. 955. 17.
Rossi, Faun. Etrus. Mant. no. 324.
Nomada Fabriciana, *Fabr. Ent. Syst.* ii. 348. 10.
Spin. Ins. Lig. fasc. 1. 152. 4.
St. Farg. Ency. Méth. viii. 371. 27.
Schäff. Germ. Zeits. i. 277. 6.
Brullé, Expéd. Sc. de Morée, iii. 346. 765.
Smith, Zool. ii. 598. 11.
Nyland. Ap. Boreal. p. 183. 14.
Eversm. Bull. Mosc. xxv. 97. 14.
Apis Fabriciella, *Kirby, Mon. Ap. Angl.* 214. 30 ♀.
Apis 4-notata, *Kirby, Mon. Ap. Angl.* ii. 214. 30 ♂.
Nomada quadrinotata, *St. Farg. Hym.* ii. 494. 26.

Hab. Britain; France; Germany; Italy; Denmark; Sweden.

10. NOMADA FURVA. B.M.

Nomada furva, *Panz. Faun. Germ.* 55. 25 ♂.
St. Farg. Hym. ii. 495. 27 ♂ ♀; *Ency. Méth.* viii. 373. 36.
Smith, Zool. ii. 599. 13 ♂ ♀.
Apis rufo-cincta, *Kirby, Mon. Ap. Angl.* ii. 216. 32 ♀, et *Cab. Mus. Ent. Soc.*
Apis Sheppardana, *Kirby, Mon. Ap. Angl.* ii. 217. 33 ♀, et *Cab. Mus. Ent. Soc.*
Nomada minuta, *Fabr. Syst. Piez.* 394. 19 ♀.
Spin. Ins. Lig. fasc. 1. 152. 8.
St. Farg. Ency. Méth. viii. 373. 35.
Schäff. Germ. Zeits. i. 278. 7.
Nyland. Ap. Boreal. p. 184. 15.
Eversm. Bull. Mosc. xxv. 98. 16.

Nomada conjungens, *Schäff. Germ. Zeits.* i. 279. 8.
Nomada Dalii, *Curt. Brit. Ent.* ix. t. 419 ♂.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

11. NOMADA FLAVICORNIS. B.M.

Nomada flavicornis, *Rossi, Faun. Etrus.* ii. 112. 934.

Hab. Italy; South of France; Albania.

12. NOMADA GERMANICA. B.M.

Nomada Germanica, *Panz. Faun. Germ.* 72. 17 ♀.
Fabr. Syst. Piez. p. 394. 18.
St. Farg. Hym. ii. 477. 13; *Ency. Méth.* viii. 372. 32.
Apis ferruginata, *Kirby, Mon. Ap. Angl.* ii. 218. 34, et t. 16. f. 4 ♂ (non *Linn.*).
Nomada stigma, *Fabr. Syst. Piez.* p. 393. 11.
Nomada ferruginata, *Schäff. Germ. Zeits.* i. 275. 1.
Brullé, Expéd. Sc. Morée, iii. 346. 763.
Smith, Zool. ii. 600. 14.
Nyland. Ap. Boreal. p. 183. 13.
Nomada pleurostieta, *Schäff. Germ. Zeits.* i. 276. 2.

Hab. Britain; France; Germany; Portugal; Denmark.

13. NOMADA INTERRUPTA.

Nomada interrupta, *Panz. Faun. Germ.* 53. 24.
St. Farg. Ency. Méth. viii. 369. 19.

Hab. Germany.

14. NOMADA FUSCICORNIS.

Nomada fuscicornis, *Nyland. Ap. Boreal.* p. 185. 17.

Hab. Finland.

15. NOMADA FULVICORNIS. B.M.

Nomada fulvicornis, *Fabr. Ent. Syst.* ii. 348. 11; *Syst. Piez.* p. 393. 12.
St. Farg. Hym. ii. 468. 5; *Ency. Méth.* viii. 371. 30.
Spin. Ins. Lig. 152. 5.

Hab. Italy; France.

16. NOMADA JACOBÆÆ. B.M.

Nomada Jacobææ, *Panz. Faun. Germ.* 72. 20 ♂.
Latr. Hist. Nat. xiv. 50. 2.
Schäff. Germ. Zeits. i. 286. 21.

Nomada Jacobææ, *St. Farg. Hym.* ii. 479. 15; *Ency. Méth.* viii. 369. 17.
Smith, Zool. ii. 594. 7 ♂ ♀.
Nyland. Ap. Boreal. p. 175. 2.
Eversm. Bull. Mosc. xxv. 94. 7.
Nomada interrupta, *Panz. Faun. Germ.* 96. 22?
Apis Jacobææ, *Kirby, Mon. Ap. Angl.* ii. 201. 20 ♂.
Apis flavopicta, *Kirby, Mon. Ap. Angl.* ii. 202. 21 ♀, and *Cab. Mus. Ent. Soc.*

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

17. NOMADA LATERALIS. B.M.

Nomada lateralis, *Panz. Faun. Germ.* 96. 20 ♀, 21 ♂.
Schäff. Germ. Zeits. i. 227. 5.
Smith, Zool. ii. 601. 16.
Eversm. Bull. Mosc. xxv. 97. 13.
Nomada melanostoma, *Schäff. Germ. Zeits.* i. 280. 11. var. ♂.

Hab. Britain; France; Germany; Russia.

18. NOMADA LATHBURIANA. B.M.

Apis Lathburiana, *Kirby, Mon. Ap. Angl.* ii. 183. 6 ♂, and *Cab. Mus. Ent. Soc.*
Apis rufiventris, *Kirby, Mon. Ap. Angl.* ii. 187. 9 ♀, and *Cab. Mus. Ent. Soc.*
Nomada rufiventris, *Smith, Zool.* ii. 590. 2 ♂ ♀.
Nyland. Revis. Ap. Boreal. p. 230.
Nomada Marshamella, *Nyland. Ap. Boreal.* p. 176. 3.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

19. NOMADA LABIATA.

Nomada labiata, *St. Farg. Encycl. Méth.* viii. 368. 16.

Hab. France.

20. NOMADA LINEOLA. B.M.

Nomada lineola, *Panz. Faun. Germ.* 55. 23 ♀.
St. Farg. Hym. ii. 486. 20; *Encycl. Méth.* viii. 367. 11.
Smith, Cat. Brit. Hym. p. 88. 20.
Apis cornigera, *Kirby, Mon. Ap. Angl.* ii. 190. 11 ♀, and *Cab. Mus. Ent. Soc.* var.
Apis subcornuta, *Kirby, Mon. Ap. Angl.* ii. 192. 12. var. ♀, and *Cab. Mus. Ent. Soc.* var.
Apis Capræ, *Kirby, Mon. Ap. Angl.* ii. 193. 13. var. ♀, and *Cab. Mus. Ent. Soc.* var.

Apis lineola, *Kirby, Mon. Ap. Angl.* ii. 194. 14. var. ♀, and *Cab. Mus. Ent. Soc.*
Apis sexcincta, *Kirby, Mon. Ap. Angl.* ii. 198. 17 ♂, and *Cab. Mus. Ent. Soc.*
Nomada cornigera, *St. Farg. Hym.* ii. 481. 16.
Smith, Zool. ii. 591. 4 ♂, ♀.

Hab. Britain; France; Germany; Denmark; Sweden.

21. NOMADA MISTURA.

Nomada mistura, *Smith. Zool.* ix. *App.* p. 127.

Hab. Britain. (Coll. F. Smith.)

22. NOMADA NIGRICORNIS.

Nomada nigricornis, *St. Farg. Encycl. Méth.* viii. 372. 31.

Hab. France (Paris).

23. NOMADA NIGELLA.

Nomada nigella, *Nyland. Ap. Boreal.* p. 176. 4.

Hab. Siberia.

24. NOMADA OCHROSTOMA. B.M.

Apis ochrostoma, *Kirby, Mon. Ap. Angl.* ii. 209. 26 ♂, and *Cab. Mus. Ent. Soc.*
Nomada ochrostoma, *Schäff. Germ. Zeits.* i. 280. 13 ♂.
Zett Ins. Lapp. p. 470. 2.
Smith, Zool. ii. 596. 9.
Nyland. Ap. Boreal. p. 179. 9; *Revis. Ap. Boreal.* p. 229. 4.
Apis Hillana, *Kirby, Mon. Ap. Angl.* ii. 208. 25 ♂, var.
Nomada vidua, *Smith, Zool.* ii. 602. 18 ♀.

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

25. NOMADA OBLIQUA.

Nomada obliqua, *St. Farg. Encycl. Méth.* viii. 366. 6.

Hab. France.

26. NOMADA OBSCURA.

Nomada obscura, *Zett. Ins. Lapp.* p. 470. 3.
Nyland. Ap. Boreal. p. 178. 6.

Hab. Sweden; Finland; Lapland.

27. NOMADA OBTUSIFRONS.

Nomada obtusifrons, *Nyland. Ap. Boreal.* p. 184. 16.

Hab. Sweden; Finland.

28. NOMADA RUFICORNIS. B.M.

Apis ruficornis, *Linn. Faun. Suec.* 1707; *Syst. Nat.* i. 958. 34, and *Cab. Mus. Linn. Soc.* ♀.
Kirby, Mon. Ap. Angl. ii. 210. 27.
Nomada ruficornis, *Fabr. Syst. Ent.* p. 389. 3; *Ent. Syst.* ii. 347. 7; *Syst. Piez.* p. 309. 2.
Rossi, Faun. Etrus. ii. 112. 933.
Panz. Faun. Germ. 55. 18.
Latr. Hist. Nat. xiv. 50. 1.
Schäff. Germ. Zeits. i. 279. 9.
St. Farg. Ency. Méth. viii. 366. 7 ♂ ♀; *Hym.* ii. 498. 29.
Blanch. Hist. Nat. des Ins. iii. 411.
Smith, Zool. ii. 596. 9.
Nyland. Ap. Boreal. p. 180. 10.
Eversm. Bull. Mosc. xxv. 96. 11.
Nomada flava, *Panz. Faun. Germ.* 55. 21 ♂.
Fabr. Syst. Piez. p. 391. 4.
Lucas, Explo. Sc. Algér. iii. 221. 165.
Nyland. Ap. Boreal. p. 179. 8.
Eversm. Bull. Mosc. xxv. 95. 9.
Apis flava, *Kirby, Mon. Ap. Angl.* ii. 186. 8 ♂.
Apis leucophthalma, *Kirby, Mon. Ap. Angl.* ii. 197. 16. var. ♂.
Nomada conjungens, *Schäff. Germ. Zeits.* i. 279. 8. var. ♂.

Hab. Britain; France; Germany; Italy; Denmark; Russia; Sweden; Finland; N. America; Canada.

29. NOMADA ROBERJEOTIANA.

Nomada Roberjeotiana, *Panz. Faun. Germ.* 72. 18 ♂, 72. 19 ♀.
Fabr. Syst. Piez. p. 391. 6 ♀.
Spin. Ins. Lig. fasc. 1. 151. 2.
St. Farg. Ency. Méth. viii. 368. 14.
Schäff. Germ. Zeits. i. 283. 19 ♀.
Smith, Zool. ii. 603. 19 ♂ ♀.
Nyland. Ap. Boreal. 178. 7 ♂; *Revis. Ap. Boreal.* 231. 6.
Eversm. Bull. Mosc. xxv. 99. 17.
Nomada neglecta, *Schäff. Germ. Zeits.* i. 283. 20 ♂.

Hab. Britain; Italy; Germany; Denmark; Sweden; Finland.

30. NOMADA RUFA. B.M.

Nomada rufa, *Rossi, Faun. Etrus.* ii. 111. 932; *Mantis. Illig. Ed.* ii. 182.

Hab. Italy; South of France; Portugal; Tunis.

31. NOMADA RUFIPES.

Nomada rufipes, *Fabr. Ent. Syst.* ii. 347. 8.

Hab. Germany.

32. NOMADA RUBRA. B.M.

Nomada rubra, *Smith, Zool.* vii. *App.* 41.

Hab. Britain.

33. NOMADA SOLIDAGINIS. B.M.

Nomada solidaginis, *Panz. Faun. Germ.* 72. 21 ♂.
Spin. Ins. Lig. fasc. 1. 152. 3.
Schäff. Germ. Zeits. i. 284. 23 ♂ ♀.
St. Farg. Hym. ii. 472. 8; *Ency. Méth.* viii. 369. 18.
Smith, Zool. ii. 595. 8.
Nyland. Ap. Boreal. p. 176. 3 ♀.
Eversm. Bull. Mosc. xxv. 94. 5.
Apis Solidaginis, *Kirby, Mon. Ap. Angl.* ii. 204. 22, and *Cab. Mus. Ent. Soc.*
Apis picta, *Kirby, Mon. Ap. Angl.* ii. 206. 23. var. ♀, and *Cab. Mus. Ent. Soc.*
Apis rufo-picta, *Kirby, Mon. Ap. Angl.* ii. 207. 24. var. ♀, and *Cab. Mus. Ent. Soc.*

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Russia.

34. NOMADA SIGNATA. B.M.

Nomada signata, *Jurine, Hym.* tab. 11. gen. 31.
St. Farg. Ency. Méth. 370. 25.
Smith, Zool. ii. 602. 17.
Nomada flava, *Schäff. Germ. Zeits.* i. 279. 9.

Hab. Britain; France; Germany; Switzerland.

35. NOMADA SUCCINCTA. B.M.

Nomada succincta, *Panz. Faun. Germ.* 55. 21.
Spin. Ins. Lig. fasc. 1. 152. 7.
Schäff. Germ. Zeits. i. 287. 30.
St. Farg. Hym. ii. 469. 6; *Ency. Méth.* viii. 372. 33.

Nomada succincta, *Lucas, Explo. Sc. Algér.* iii. 218. 158.
Nyland. Ap. Boreal. p. 175. 1.
Smith, Cat. Hym. p. 89. 24.
Eversm. Bull. Mosc. xxv. 92. 1.
Apis Goodeniana, *Kirby, Mon. Ap. Angl.* ii. 180. 4.
Nomada Goodeniana, *Smith, Zool.* ii. 590. 1.

Hab. Britain; France; Germany; Russia.

36. NOMADA SEXFASCIATA. B.M.

Nomada sexfasciata, *Panz. Faun. Germ.* 62. 18 ♂.
Schöff. Germ. Zeits. i. 285. 24.
St. Farg. Hym. ii. 471. 7.
Smith, Zool. ii. 593. 6 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 218. 155.
Nyland. Revis. Ap. Boreal. p. 228.
Apis Schæfferella, *Kirby, Mon. Ap. Angl.* ii. 199. 18 ♀.
Apis connexa, *Kirby, Mon. Ap. Angl.* ii. 199. 19 ♂.

Hab. Britain; France; Germany; Sweden; Russia.

37. NOMADA SCUTELLARIS.

Nomada scutellaris, *St. Farg. Ency. Méth.* viii. 365. 5.

Hab. France.

38. NOMADA VARIA. B.M.

Nomada fucata, *Panz. Faun. Germ.* 55. 19 ♀.
Fabr. Syst. Piez. p. 390. 3 ♀.
Spin. Ins. Lig. fasc. 1. 151. 1.
Schäff. Germ. Zeits. i. 284. 22.
Smith, Zool. ii. 593. 5 ♂ ♀.
Eversm. Bull. Mosc. xxv. 95. 8.
Apis varia, *Kirby, Mon. Ap. Angl.* ii. 185. 7 ♂.
Apis fucata, *Kirby, Mon. Ap. Angl.* ii. 195. 15 ♀.
Nomada varia, *Panz. Faun. Germ.* 55. 20 ♂.
Spin. Ins. Lig. fasc. 1. 152. 6.
St. Farg. Hym. ii. 489. 22 ♂; *Ency. Méth.* viii. 366. 8.
Nomada zonata, *St. Farg. Hym.* ii. 491. 23 (non *Panz.*).

Hab. Britain; France; Germany; Austria.

39. NOMADA VAGA.

Nomada vaga, *Panz. Faun. Germ.* 55. 22.
St. Farg. Ency. Méth. viii. 372. 34.

Hab. Austria.

40. NOMADA VERSICOLOR.

Nomada versicolor, *Panz. Faun. Germ.* 53. 22.
St. Farg. Ency. Méth. viii. 367. 12.

Hab. Austria.

41. NOMADA XANTHOSTICTA.

Apis xanthosticta, *Kirby, Mon. Ap. Angl.* ii. 212. 28 ♀.
Nomada xanthosticta, *Smith, Zool.* ii. 600. 15, and vi. 2214.

Hab. Britain. (Coll. F. Smith.)

42. NOMADA ZONATA.

Nomada zonata, *Panz. Faun. Germ.* 53. 20.
St. Farg. Ency. Méth. viii. 371. 26.
Eversm. Bull. Mosc. xxv. 97. 12.

Hab. Austria; France; Russia.

43. NOMADA LUTEA.

Nomada lutea, *Eversm. Bull. Mosc.* xxv. 96. 10.

Hab. Russia.

44. NOMADA ORNATA.

Nomada ornata, *Eversm. Bull. Mosc.* xxv. 98. 15.

Hab. Russia.

45. NOMADA PUNCTATA.

Nomada rubra, *Eversm. Bull. Mosc.* xxv. 100. 19 (nec *Smith*).

Hab. Russia.

46. NOMADA RUBRICOSA.

Nomada rubricosa, *Eversm. Bull. Mosc.* xxv. 100. 20.

Hab. Russia.

47. NOMADA PASTORALIS.

Nomada pastoralis, *Eversm. Bull. Mosc.* xxv. 101. 21.

Hab. Russia.

48. NOMADA BIMACULATA.

Nomada bimaculata, *Eversm. Bull. Mosc.* xxv. 99. 18.

Hab. Russia.

49. NOMADA DUBIA.

Nomada dubia, *Eversm. Bull. Mosc.* xxv. 94. 6.

Hab. Russia.

50. NOMADA ABERRANS.

Nomada aberrans, *Eversm. Bull. Mosc.* xxv. 93. 4.

Hab. Russia.

51. NOMADA FLAVINERVIS.

Nomada flavinervis, *Brullé, Exped. Sc. Morée*, iii. 344. 762; *Atlas*, pl. 49. f. 2.

Hab. The Morea.

52. NOMADA TRICOLOR. B.M.

Nomada tricolor, *Brullé, Exped. Sc. Morée*, iii. 345. 763; *Atlas*, pl. 49. f. 3.

Hab. The Morea.

53. NOMADA FULVIPES.

Nomada fulvipes, *Brullé, Exped. Sc. Morée*, iii. 343. 761; *Atlas*, pl. 49. f. 1.

Hab. The Morea.

54. NOMADA FERRUGINEA.

Nomada ferruginea, *St. Farg. Ency. Méth.* viii. 370. 22.

Hab. Bagdad.

55. NOMADA BIFASCIATA.

Nomada bifasciata, *St. Farg. Ency. Méth.* viii. 365. 3.

Hab. Barbary.

56. NOMADA VERSICOLOR. B.M.

Female. Length 4½ lines.—Head and thorax black, the clypeus, a quadrate spot above, the face on each side, and the entire orbits of the eyes of a reddish-yellow, the mandibles of the same colour, their apex rufo-piceous; the antennæ ferruginous, the scape having a fuscous stain behind. Thorax, the collar, tubercles, the breast, a spot beneath the wings, a broad epaulet over the tegulæ and a stripe parallel with it, the scutellum and post-scutellum, a stripe on each side of the metathorax and the legs, red. Abdomen, the basal segment black, having a transverse

red band in the middle; the second segment has a broad yellow band at the base, an angular fuscous spot in the middle, the apical portion ferruginous, darkest towards the margin; the three following segments yellow, and having a narrow ferruginous margin; the sixth segment covered with silvery pile.

Hab. North China.

57. NOMADA SOLITARIA. B.M.

Male. Length 5 lines.—Black, the clypeus and cheeks covered with silvery-white pubescence, the upper portion of the face, the vertex, and disk of the thorax clothed with yellow pubescence; the sides of the face, anterior margin of the clypeus, labrum, mandibles and scape in front yellow; the flagellum fulvous beneath. Thorax, the collar, tegulæ, tubercles and scutellum yellow; the coxæ and trochanters black; the legs otherwise yellow, excepting a black stain on the anterior and intermediate femora towards their base above, the posterior pair being black excepting at the knees; the posterior tibiæ have a dark stain within; the basal joint of the posterior tarsi black above; the wings subhyaline, their apical margins slightly clouded. Abdomen, the basal segment has a broad yellow fascia towards its apical margin, the second segment has a similar fascia much attenuated in the middle, and the three following have each a narrow fascia of the same colour, all the apical margins being fusco-ferruginous; beneath, the segments are obscurely banded in a similar manner.

Hab. Northern India. From Captain Boys' Collection.

58. NOMADA LUSCA. B.M.

Female. Length 3 lines.—Ferruginous, the antennæ as long as the head and thorax, the flagellum fuscous above. Thorax, the wings fusco-hyaline, darkest at their apical margins; the apical joints of the tarsi fuscous. Abdomen subpetiolate, the basal segment having on each side a black spot.

Hab. Philippine Islands.

59. NOMADA DECORATA.

Female. Length 4½ lines.—Head and thorax black; the anterior margin of the clypeus, sides of the face, orbits of the eyes slightly interrupted at their vertex, the labrum, mandibles and scape in front of an orange-yellow; the flagellum beneath and its apical joint ferruginous; otherwise fuscous above. The collar, tubercles, scutellum, post-scutellum, and an oblong macula on each side of the metathorax yellow, having more or less of a fer-

ruginous stain; legs yellow, varied with ferruginous; the coxæ and trochanters above, the posterior femora beneath, and the basal joint of the posterior tarsi above, black; wings subhyaline, slightly clouded at their apical margins, their nervures ferruginous. The basal segment of the abdomen black above, having a broad yellow fascia, its apical margin ferruginous; the rest of the abdomen ferruginous, each segment having a broad yellow band; that on the second segment attenuated in the middle; the fascia continued beneath the abdomen.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

60. NOMADA BIPUNCTATA.

Nomada bipunctata, *Fabr. Syst. Piez.* 392. 8.
St. Farg. Ency. Méth. viii. 369. 20.

Hab. Tranquebar.

61. NOMADA ALBO-MACULATA.

Nomada albo-maculata, *Lucas, Explo. Sc. Algér.* iii. 216. 156. pl. 10. f. 8.

Hab. Algeria.

62. NOMADA DUPLEX. B.M.

Female. Length 4½ lines.—Black, the head and thorax have a fulvous pubescence, most dense on the clypeus and sides of the metathorax, the tubercles, tegulæ, and a spot on the scutellum yellow; the wings fuscous, having an indistinct pale macula towards their apex; the coxæ and trochanters black, the femora, tibiæ and tarsi ferruginous. Abdomen black, the first, second and third segments have an oblong macula on each side, pointed within; between the two basal spots a ferruginous stain; the fourth segment has an entire fascia, and the fifth segment is entirely yellow; beneath, the four apical segments have a transverse broad yellow fascia situated posteriorly.

Hab. Tangiers.

63. NOMADA FLAVO-MACULATA. B.M.

Nomada flavo-maculata, *Lucas, Explo. Sc. Algér.* iii. 216. 154. pl. 10. f. 6.

Hab. Algeria.

64. NOMADA FUSCIPENNIS. B.M.

Nomada fuscipennis, *St. Farg. Hym.* ii. 474. 10.
Lucas, Explo. Sc. Algér. iii. 219. 160.

Hab. Algeria.

65. NOMADA FENESTRATA.

Nomada fenestrata, *St. Farg. Hym.* ii. 476. 12.
Lucas, Explo. Sc. Algér. iii. 220. 162.

Hab. Algeria.

66. NOMADA KIRBYI.

Nomada Kirbyi, *St. Farg. Hym.* ii. 485. 19.
Lucas, Explo. Sc. Algér. iii. 221. 164.

Hab. Algeria.

67. NOMADA MAURITANICA.

Nomada mauritanica, *St. Farg. Hym.* ii. 465. 1.
Lucas, Explo. Sc. Algér. iii. 213. pl. 10. f. 2.

Hab. Algeria.

68. NOMADA NUMIDA. B.M.

Nomada numida, *St. Farg. Hym.* ii. 465. 2.
Lucas, Explo. Sc. Algér. iii. 214. 150.

Hab. Algeria; South of Europe.

69. NOMADA PUSILLA.

Nomada pusilla, *St. Farg. Hym.* ii. 466. 3.
Lucas, Explo. Sc. Algér. iii. 214. 151. pl. 10. f. 4.

Hab. Algeria.

70. NOMADA PARVULA. B.M.

Nomada parvula, *Lucas, Explo. Sc. Algér.* iii. 215. 152. pl. 10. f. 5.

Hab. Algeria.

71. NOMADA PUNCTATA. B.M.

Nomada punctata, *St. Farg. Hym.* ii. 478. 14.
Lucas, Explo. Sc. Algér. iii. 220. 165.

Hab. Algeria (Oran).

72. NOMADA RUFICEPS.

Nomada ruficeps, *St. Farg. Hym.* ii. 475. 11.
Lucas, Explo. Sc. Algér. iii. 219. 161.

Hab. Algeria.

73. NOMADA SANGUINEA. B.M.

Female. Length 3½ lines.—Bright red, the face and cheeks have a thin scattered silvery pubescence; the two basal segments of the flagellum above, and the eighth to the twelfth segments above fuscous, a large triangular black patch on the metathorax beneath the post-scutellum, also an oblique black stripe behind the insertion of the posterior wings; the wings fusco-hyaline, a pale macula towards their apex; the posterior tibiæ have a fuscous stain within; the posterior coxæ covered with silvery pubescence, a line of the same on each side of the metathorax; the margin of the apical segment of the abdomen fringed with silvery-white pubescence.

Hab. Algeria.

74. NOMADA VARIABILIS.

Nomada variabilis, *Lucas, Explo. Sc. Algér.* iii. 216. 155. pl. 10. f. 7.

Hab. Algeria.

75. NOMADA VALIDA. B.M.

Female. Length 4 lines.—Black, the anterior portion of the clypeus, and sometimes a dot above, the antennæ, labrum, mandibles and orbits of the eyes ferruginous; the disk of the thorax has on each side a large oblong ferruginous spot deeply notched anteriorly; the tubercles, a minute spot beneath the wings, sometimes united to a large one beneath, the scutellum and two minute spots beneath on the metathorax, ferruginous; wings subhyaline, a pale spot towards their apical margins which are clouded, their nervures pale ferruginous; the coxæ, trochanters and femora ferruginous towards their apex, the anterior pair of the latter being black merely at their extreme base; the tibiæ and tarsi ferruginous. Abdomen ferruginous, the first segment being black at the base, the apical margins of the segments having an indistinct darker stain.

Hab. Nova Scotia.

76. NOMADA IMBRICATA. B.M.

Female. Length 4½–5 lines.—Head ferruginous, a black spot above the insertion of each antenna, also a minute black dot on each side of the clypeus, above which there is sometimes a yellow spot; thorax ferruginous, the collar, tubercles, two spots on the scutellum, and an oblique line on each side of the metathorax yellow; a line down the centre of the metathorax and another oblique one on the sides of the thorax behind the wings black,

the legs ferruginous; wings slightly fuscous. Abdomen ferruginous, a yellow line or a spot on each side of the basal segment, and a broad band of the same colour on the basal margins of the three following segments, each more or less attenuated in the middle, the first usually interrupted, the fifth segment yellow.

Hab. United States.

77. NOMADA PULCHELLA.

Male. Length 3½ lines.—Black, the clypeus, labrum, mandibles and orbits of the eyes, not reaching their vertex, yellow; the scape yellow in front, the flagellum fulvous beneath. Thorax, the tubercles, tegulæ, and two spots on the scutellum yellow; legs ferruginous, the intermediate and anterior pairs yellowish in front, the posterior femora and tibiæ blackish within; the wings hyaline, faintly clouded at their apical margins, their nervures rufo-testaceous. Abdomen, the basal segment has a transverse ferruginous band, the four following segments have continuous yellow bands placed a little before the middle, the two first attenuated in the middle, the apex yellow.

Hab. North America. (Coll. F. Smith.)

78. NOMADA FERVIDA. B.M.

Female. Length 4–5 lines.—Black, the sides of the face, the clypeus, labrum, mandibles and antennæ ferruginous, the latter slightly fuscous above; the clypeus and flagellum sometimes dark fuscous. Thorax, the disk coarsely rugose, the collar, tubercles, tegulæ, a spot beneath the wings, the scutellum and postscutellum ferruginous, the two latter sometimes have a yellowish stain; the legs ferruginous, the wings fuscous, their apical margins having a darker stain; the basal segment of the abdomen has a transverse rufo-testaceous band, sometimes bordered with yellow; the second segment has a similar band placed beyond the middle, the band more or less attenuated in the middle; the fourth segment has sometimes a transverse narrow line, and the fifth sometimes an oblique yellow dot.

Hab. St. John's Bluff, East Florida; Georgia. (E. Doubleday.)

79. NOMADA BISIGNATA. B.M.

Nomada bisignata, *Say, Append. Long's Exped. to St. Peter's Riv.* ii. 84; *Bost. Journ. Nat. Hist.* i. 402. 2.

Hab. United States.

80. NOMADA AMERICANA. B.M.

Nomada Americana, *Kirby, Faun. Boreal. Amer.* p. 269. 1. pl: 6. f. 3 ♀.

Hab. North America; Hudson's Bay.

81. NOMADA ARTICULATA. B.M.

Male. Length 3½ lines.—Black, the clypeus, labrum, mandibles, sides of the face, scape in front and flagellum towards the base yellow, the latter ferruginous towards the apex, above fuscous, the scape black above, joints of the flagellum submoniliform. The tubercles, tegulæ, scutellum and post-scutellum ferruginous, the wings hyaline, the nervures ferruginous, the apical margin of the superior wings fuscous; legs ferruginous; the coxæ and posterior femora within fusco-ferruginous; the two basal segments of the abdomen dark ferruginous, the apical ones black; a minute spot on each side of the first segment, a large ovate one, pointed within, on the second, and a transverse fascia on the four following placed about the middle, yellow; the apex ferruginous.

Hab. North America. (E. Doubleday.)

82. NOMADA ANNULATA. B.M.

Female. Length 3¼ lines.—Black, the sides of the face, orbits of the eyes, clypeus, labrum and mandibles yellow; the antennæ and a minute spot above the clypeus ferruginous. Thorax, the collar, tubercles, a spot before and a line below them, the scutellum and a patch on each side of the metathorax yellow; legs ferruginous, variegated with yellow, the wings slightly clouded on their apical margins. Abdomen slightly ferruginous towards the base, each segment having a transverse yellow band; the three basal bands more or less attenuated in the middle, the bands continued beneath the abdomen.

Male. Length 3¼ lines.—This sex has the clypeus, labrum, mandibles, scape of the antennæ in front and the flagellum beneath of a pale yellowish-white, the latter is fuscous above towards the base and again towards the apex, the intervening joints are ferruginous and the apical one entirely yellowish-white; thorax, the scutellum ferruginous; the tubercles, tegulæ and nervures of the wings reddish-yellow, the wings subhyaline, having a fuscous cloud at their apex. Abdomen black at the extreme base, the rest of the first segment and the whole of the second ferruginous, the latter having a large angulated yellow macula on each side, the first only a minute dot; each segment

from the fourth to the apical one has a narrow yellow band; beneath entirely ferruginous.

Hab. North America. (Presented by Sir Roderick Impey Murchison.)

83. NOMADA LUTEOLA.

Nomada luteola, *St. Farg. Ency. Méth.* viii. 365. 2.

Hab. Carolina.

84. NOMADA RUBICUNDA.

Nomada rubicunda, *Ency. Méth.* viii. 365. 4.

Hab. Carolina.

85. NOMADA VINCTA.

Nomada vincta, *Say, Append. Long's Exped. to St. Peter's Riv.* ii. 401. 1.

In some specimens the clypeus, labrum and mandibles are yellow.

Hab. Indiana (America).

86. NOMADA SULPHURATA. B.M.

Female. Length 5 lines.—Head of a sulphur-yellow, a black line passes forwards from the base of the antennæ half-way down the lateral margins of the clypeus, above the insertion of the antennæ is a circular black patch united to a quadrate one which occupies the vertex, a minute round yellow spot in front of the anterior stemma; the scape yellow in front, ferruginous behind and having a narrow black line, the two basal joints of the flagellum ferruginous in front, the apex of the mandibles ferruginous. The disk of the thorax black, having two central longitudinal yellow lines not extending to the collar or scutellum, both of which are also yellow; the tegulæ, and also a line which passes over them from the collar to the angles of the scutellum, a broad longitudinal patch on each side of the metathorax, the sides of the breast, tubercles and legs yellow, the latter varied with ferruginous stains; the wings fusco-hyaline, the nervures ferruginous, having a pale macula towards their apex. Abdomen black, each segment having a broad yellow fascia, the margins of which are waved; beneath a broad yellow fascia on the second segment, the following are ferruginous narrowly edged with yellow.

Hab. Georgia.

87. NOMADA TORRIDA. B.M.

Female. Length 4½ lines.—Head red, the basal joint and the flagellum of the antennæ beneath red. Thorax red, the collar obscurely yellow, the scutellum and sides of the metathorax of a paler red, the sides of the metathorax covered with white pubescence; the legs have a short silvery pile, particularly on the posterior femora, tibiæ and tarsi within; the wings fusco-hyaline, having a pale lunule towards their apex. Abdomen ferruginous, the extreme base black, also two black spots on each side of the basal segment; the third segment has on each side an oblong yellow stripe at its basal margin, the fourth has a narrow yellow fascia at its basal margin, the fifth entirely yellow.

The yellow markings on this species are in some examples very obscure.

Hab. Georgia.

88. NOMADA MINIATA. B.M.

Female. Length 4¼ lines.—Head and antennæ red, the apex of the mandibles fuscous. The thorax and legs red, the collar, a spot in front of the tegulæ and a large macula on each side of the metathorax yellow, the latter covered with a silvery-white pubescence; two lines in the middle of the thorax, another passing over the tegulæ and the scutellum pale red; the wings hyaline, slightly fuscous at their apical margins, the nervures ferruginous. Abdomen entirely red, the second segment having on each side an ovate yellow spot; beneath immaculate.

The yellow markings on the thorax are sometimes obsolete.

Hab. Georgia.

Genus 22. EPICLOPUS.

Epiclopus, *Spin. Faun. Chili.* vi. 183.

Ocelli placed in a line on the vertex. Scutellum rounded, not toothed. The superior wings having one marginal and three submarginal cells; the third submarginal much restricted towards the marginal, receiving the second recurrent nervure a little beyond the middle; the first recurrent nervure received by the second submarginal near its apex.

1. EPICLOPUS GAYI.

Epiclopus Gayi, *Spin. Faun. Chili.* vi. 184. 1.

Female. Length 6 lines.—Black, the head anteriorly blue, variegated with white; the thorax above and the first and second

segments of the abdomen clothed with white pubescence, the apical segments blue.

Hab. Chili.

Genus 23. AMMOBATES.

Ammobates, *Latr. Gen. Cr. Ins.* iv. 169.

1. AMMOBATES RUFI-VENTRIS.

Ammobates rufi-ventris, *Latr. Gen. Cr. Ins.* iv. 169.
St. Farg. & Serv. Ency. Méth. x. 17. 1.
St. Farg. Hym. ii. 510. 1.
Blanch. Hist. Nat. des Ins. iii. 412.

Hab. Portugal.

2. AMMOBATES BICOLOR. B.M.

Ammobates bicolor, *St. Farg. & Serv. Ency. Méth.* x. 17. 2.
St. Farg. Hym. ii. 511. 2.

This species in all probability does not belong to the genus; the maxillary palpi have only four joints, in the generic characters of Latreille the number given is six;—not having a specimen of the type to examine, the present species is retained in the genus.

3. AMMOBATES MUTICUS.

Ammobates muticus, *Spin. Ann. Soc. Ent. Fr.* (1843) i. 141. 29.

Hab. Spain.

4. AMMOBATES VARIEGATUS.

Female. Length 3½ lines.—Head ferruginous, the vertex and face as low as the insertion of the antennæ fuscous, antennæ ferruginous, the flagellum fuscous above. Thorax ferruginous, the collar, metathorax, and a stain down the middle of the disk fuscous; the wings fusco-hyaline, their apical margins having a dark cloud, the superior wings varied with hyaline spaces beyond the enclosed cells, the tegulæ and extreme base of the wings ferruginous; the disk covered with large dispersed punctures, and having a deep impressed line down the centre which also passes over the scutellum, which is consequently bituberculate; the legs red, the posterior femora having a fuscous stain above. Abdomen ferruginous, the three apical segments sub-fuscous; a short silvery pubescence clothes the face and metathorax, and is more thinly scattered on the legs and abdomen.

Hab. Greece (Thessaly). (Coll. W. W. Saunders, Esq.)

Genus 24. LEIOPODUS.

F. Smith's MSS.

The labial palpi 4-jointed, the two basal ones elongate, filiform, of about equal length, the third and fourth minute, inserted at the side of the second, near its apex. The maxillary palpi 4-jointed, the basal joint short and stout, the second more slender, twice the length of the basal one; the third rather shorter than the second, the apical one minute. The ocelli placed in a curve on the vertex. The thorax rounded, wider than the head; the superior wings having one marginal and three submarginal cells; the first submarginal cell oblique-quadrate, the second wider than the first and narrowed towards the marginal, receiving the first recurrent nervure near the apex; the third submarginal narrower than the second and slightly narrowed towards the marginal. Abdomen elongate, conical. The legs simple, the claws simple.

The general habit of this genus is that of an *Epeolus*.

1. LEIOPODUS LACERTINUS.

Female. Length 4½ lines.—Black, the pubescence on the face of a glittering yellowish-white, most sparing on the clypeus and the region of the ocelli; the labrum subquadrate, rounded at the anterior angles, deeply punctured and thinly sprinkled with similar pubescence to that on the face; the antennæ filiform, the apical joint compressed, obtuse at the apex. Thorax having a deep longitudinal depression, which passes over the scutellum; the depression broadest anteriorly; another depression on each side; the pubescence on the thorax anteriorly yellowish-white, posteriorly and beneath it is nearly white; the legs red, mottled with a white glittering pile, the tarsi fuscous; the wings subhyaline, irregularly stained with fuscous, the apical margins clouded, darkest beyond the marginal cell along the margin. Abdomen conical, the basal segment having on each side a stripe of white pubescence which is recurved upwards at the extreme lateral margins, the second and following segments have a line of white pubescence along their basal margins which recurve downwards and are produced inwardly a little way along the apical margins; beneath, covered with a similar white pile, the second and third segments having each two round denuded spots, the basal and apical segments naked.

The male exactly resembles the female, differing only in having an additional segment to the antennæ and abdomen.

The pubescence of this insect is most beautifully plumose or feathered.

Hab. South America. (Coll. W. W. Saunders, Esq.)

Genus 25. PASITES.

Nomada, pt., *Fabr. Syst. Piez.* p. 390.
Pasites, *Latr. Gen. Cr. Ins.* iv. 141.
Tiphia, pt., *Panz. Faun. Germ.* 53. 6.

1. PASITES SCHOTTII. B.M.

Pasites Schottii, *Latr. Gen. Cr. Ins.* iv. 141.
Blanch. Hist. Nat. des Ins. iii. 412.
Eversm. Bull. Mosc. xxv. 89. 1.
St. Farg. Hym. ii. 532. 1.
Pasites unicolor, *Jurine, Hym.* p. 224.
Nomada Schottii, *Fabr. Syst. Piez.* p. 394. 15.
Tiphia brevicornis, *Panz. Faun. Germ.* 53. 6.
Hab. France; Germany; Russia.

2. PASITES ATRA.

Pasites atra, *Latr. Gen. Cr. Ins.* iv. 171.
Spin. Ins. Lig. ii. t. 2. f. 7?
St. Farg. Hym. ii. 533. 2.
Hab. France; Italy.

M. Spinola has figured in plate 2 an insect which he believes to have been a *Pasites*, but as the specimen was destroyed or lost by the artist who executed the figure, there is no description of it in the work.

3. PASITES FASCIATA.

Pasites fasciata, *Eversm. Bull. Mosc.* xxv. 90. 2.
Hab. Russia.

4. PASITES DICHROA. B.M.

Male. Length 3¾ lines.—Head and thorax black, strongly punctured, the face below the insertion of the antennæ has a short glittering white pubescence, the flagellum fusco-ferruginous beneath, the labrum and mandibles ferruginous. Thorax, a longitudinal depression in the centre and a shorter one on each side opposite the tegulæ; the scutellum bituberculate; the tubercles prominent and having a fringe of white pubescence behind; the wings dark fuscous; the legs ferruginous, the coxæ black. Abdomen ferruginous.

Hab. Sierra Leone. (Coll. the Rev. D. F. Morgan.)

It is very probable that the present species may be separated from *Pasites* by a monographer of these parasitic genera, in which case we would propose the name of *Morgania*.

Genus 26. PHILEREMUS.

Epeolus, pt., *Fabr. Syst. Piez.* p. 388.
Phileremus, *Latr. Gen. Cr. Ins.* iv. 169.

1. PHILEREMUS PUNCTATUS. B.M.

Epeolus punctatus, *Fabr. Syst. Piez.* p. 389. 2.
Epeolus Kirbyanus, *Latr. Gen. Cr. Ins.* i. t. 14. f. 10.
Phileremus Kirbyanus, *Latr. Gen. Cr. Ins.* iv. p. 169.
Phileremus punctatus, *St. Farg. Ency. Méth.* x. 104. 1; *Hym.* ii. 513. 2.
Blanch. Hist. Nat. Ins. iii. 412.
Hab. France.

2. PHILEREMUS ABDOMINALIS.

Phileremus abdominalis, *Eversm. Bull. Mosc.* xxv. 88. 1.
Hab. Russia.

3. PHILEREMUS HIRSUTULUS.

Phileremus hirsutulus, *Eversm. Bull. Mosc.* xxv. 89. 2.
Hab. Russia.

4. PHILEREMUS MELECTOIDES. B.M.

Female. Length 5 lines.—Jet-black, the head and thorax strongly punctured, the face below the insertion of the antennæ thinly covered with a mixture of fuscous and griseous pubescence, the punctures large and distant on the vertex. Thorax, a central longitudinal depression on the disk, and also a slight one on each side opposite the tegulæ; a little white pubescence on each side of the metathorax at its base, also on the posterior margin of the tubercles; the tibiæ and tarsi have a short white pubescence above, that on the tibiæ intermixed with short black bristles or spines, the apical joints of the tarsi ferruginous, the pubescence on the tarsi beneath fuscous; the wings fuscous, the nervures black. Abdomen short, convex, and highly polished at the base, all the segments except the apical one have on each side a spot of snow-white pubescence, those on the basal segment round, from which each in succession is more elongate; the basal half of each segment is distantly and rather strongly punctured, the apical half finely and closely so.

Male. Exactly corresponds with the female, only being rather more pubescent.

Hab. Albania.

This insect has the wings of an *Ammobates*, but its maxillary

palpi are only two-jointed, its labial palpi being four-jointed; it might probably form a subgenus of *Ammobates*.

5. PHILEREMUS NIVEATUS.

Philerémus niveatus, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 535. 75.

Hab. Egypt.

6. PHILEREMUS ORANIENSIS.

Philerémus oraniensis, *St. Farg. Hym.* ii. 512. 1.
Lucas, Explo. Sc. Algér. iii. 209. 142. pl. 9. f. 8.

Hab. Algéria (Oran).

Genus 27. EPEOLUS.

Apis, pt., *Linn. Faun. Suec.* and *Syst. Nat.* i. 953 (1766).
Nomada, pt., *Fabr. Ent. Syst.* ii. 345 (1793).
Epeolus, *Latr. Gen. Cr. Ins.* iv. 171 (1809).

1. EPEOLUS VARIEGATUS. B.M.

Apis variegata, *Linn. Syst. Nat.* i. 957. 24 ♂, and *Cab. Mus. Linn. Soc.*
Kirby, Mon. Ap. Angl. ii. 222. 36. t. 16. f. 6 ♀.
Donov. Brit. Ins. xii. 10. t. 399. f. 2.
Nomada variegata, *Fabr. Syst. Ent.* p. 389. 2; *Ent. Syst.* ii. 347. 5.
Apis muscaria, *Christ. Hym.* 195. t. 17. f. 5 ♂.
Nomada crucigera, *Panz. Faun. Germ.* 61. 20 ♂.
Epeolus variegatus, *Latr. Ins.* iii. 375.
Fabr. Syst. Piez. p. 388. 1.
Jurine, Hym. t. 14. *Supp.*
Curtis, Brit. Ent. ii. t. 516.
Blanch. Hist. Nat. Ins. iii. 412.
St. Farg. Hym. ii. 462. 2. t. 17. f. 5 ♀. 6 ♂.
Guér. Icon. R. Anim. Ins. 454. t. 74. f. 1.
Smith, Zool. iii. 1150. 1.
Nyland. Ap. Boreal. p. 174. 1.
Eversm. Bull. Mosc. xxv. 102. 3.

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland; Cape of Good Hope.

Specimens of this species from the Cape of Good Hope differ merely in having the legs and tegulæ darker, the red on the scutellum reduced to two rounded spots, in every other particular they correspond with the European examples: amongst specimens from Sicily some have the abdomen red, variegated as usual; British specimens are sometimes partly red.

2. EPEOLUS PICTUS.

Epeolus pictus, *Nyland. Ap. Boreal.* p. 174. 2.

Hab. Siberia.

3. EPEOLUS DONATUS. B.M.

Epeolus donatus, *Harris, Cat.*

Female. Length 4–5½ lines.—Black, head and thorax covered with confluent punctures, the clypeus more finely punctured and interspersed with large punctures; above the clypeus the face is covered with cinereous pubescence. Thorax, a line on the collar, another over the tegulæ and passing along the base of the scutellum, two abbreviated lines on the prothorax, and one passing from the base of the wings round the metathorax over the postscutellum, of cinereous pubescence; the legs are variegated with pubescence of the same colour; wings fusco-hyaline, clearest towards their base. Abdomen very finely punctured, at its apex is a semicircular space which is rugose; the basal segment has its margins traversed by a band of cinereous pubescence, slightly interrupted in the centre of both the basal and apical margins, the three following segments have a similar band on their apical margins: the apical segment has a triangular patch on each side.

The male exactly resembles the female, differing only in the usual characteristics of the sex.

Hab. United States; Ohio (Mount Pleasant). (E. Doubleday and R. Foster.)

4. EPEOLUS MERCATUS. B.M.

Epeolus mercatus, *Fabr. Syst. Piez.* p. 389. 3.

Hab. Carolina.

5. EPEOLUS REMIGATUS. B.M.

Melecta remigata, *Fabr. Syst. Piez.* p. 387. 5.

Epeolus remigatus, *St. Farg. & Serv. Ency. Méth.* x. 104. 2. *St. Farg. Hym.* ii. 461. 1.

Epeolus lunatus, *Say, App. Long's Voy. St. Peter's River* (*Keating*), p. 85.

Hab. North America; Carolina; Mexico.

This species varies in having the legs entirely red, the antennæ also are occasionally red beneath; these differences occur in the specimens from Mexico, but they cannot be considered sufficient to constitute a distinct species.

6. EPEOLUS SCUTELLARIS. B.M.

Epeolus scutellaris, *Say, Append. Long's Voy. St. Peter's River (Keating)*, ii. 85.

Hab. North America; Carolina; Mexico.

7. EPEOLUS ZONATUS. B.M.

Female. Length 4 lines.—Head and thorax black, the antennæ, labrum and mandibles ferruginous, the face has a little silvery pubescence. Thorax encircled with ferruginous; the collar, sides of prothorax, tegulæ and scutellum being red, the scutellum armed on each side with a short stout acute tooth; the legs ferruginous, the wings fusco-ferruginous, the nervures ferruginous. Abdomen, the two basal segments ferruginous, the apical ones black; the apical margins of the segments have fasciæ of short white pubescence, usually much interrupted; the extreme base of the abdomen black.

Male. This sex differs in having the apex of the clypeus ferruginous, and only the basal segment of the abdomen of that colour.

Hab. United States; St. John's Bluff, East Florida.

8. EPEOLUS FUMIPENNIS.

Epeolus fumipennis, *Say, Bost. Journ. Nat. Hist.* i. 403.

Hab. North America.

9. EPEOLUS BRASILIENSIS.

Male. Length 4½ lines.—Black, the face covered with short silvery-white pubescence, the flagellum beneath and the mandibles towards their apex ferruginous. Thorax, the disk covered with confluent punctures, a line of golden pubescence on the collar and two short ones in the middle of the prothorax uniting with the collar; the scutellum rounded behind and having on each side a stout tooth; the legs nigro-ferruginous and having a short white glittering pile, the tarsi ferruginous; the wings fuscous, and having several hyaline spots towards their apical margins. Abdomen entirely covered with a short reddish-brown pile; the basal segment has on each side near its apical margin a line of golden-coloured pubescence which curves upward along the extreme lateral margins, the curved portion white; the following segments have each a narrow golden fascia towards their apical margins, each fascia becoming broader towards the apex, covered beneath with white pubescence.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

10. EPEOLUS LUCTUOSUS.

Epeolus luctuosus, *Spin. Faun. Chili.* vi. 189. 3.

Female. Length 3 lines.—Antennæ black, beneath from the third to tenth joints red. Abdomen maculated; the legs black, the tibiæ having two white rings; wings hyaline, nervures black.

Hab. Chili.

11. EPEOLUS GAYI.

Epeolus Gayi, *Spin. Faun. Chili.* vi. 188. 2.

Female. Length 5 lines.—Black; the first and second joints of the antennæ red; the metathorax naked in the middle; abdomen, the margins of the segments having bands of pale pubescence; the legs reddish beneath.

Hab. Chili.

12. EPEOLUS GIGAS.

Epeolus gigas, *Spin. Faun. Chili.* vi. 187. 4.

Female. Length 6 lines.—Labrum, antennæ and tegulæ red; head, thorax and abdomen black, the latter having yellowish bands; the tibiæ and tarsi ferruginous; wings hyaline, nervures fuscous, the base of the wings testaceous.

Hab. Chili.

13. EPEOLUS TRISTIS.

Epeolus luctuosus, *Eversm. Bull. Mosc.* xxv. 101. 1 (nec *Spin.*).

Hab. Russia.

14. EPEOLUS TRANSITORIUS.

Epeolus transitorius, *Eversm. Bull. Mosc.* xxv. 102. 3.

Hab. Russia.

Genus 28. CŒLIOXYS.

Apis, pt., *Linn. Faun. Suec.*; *Syst. Nat.* i. 953 (1766).
Anthophora, pt., *Fabr. Syst. Piez.* 372 (1804).
Megachile, pt., *Latr. Hist. Nat.* 53. sect. 3 (1805).
Cœlioxys, *Latr. Gen. Cr. Ins.* iv. 166 (1809).

1. CŒLIOXYS QUADRIDENTATA. B.M.

Apis quadridentata, *Linn. Faun. Suec.* 1703; *Syst. Nat.* i. 958. 29, and *Cab. Mus. Linn. Soc.* ♂.

Apis quadridentata, *Fabr. Syst. Ent.* p. 386. 49.
Panz. Faun. Germ. 55. 13.
Apis conica, *Linn. Faun. Suec.* 1705; *Syst. Nat.* i. 958. 32, and *Cab. Mus. Linn. Soc.* ♀.
Fabr. Syst. Ent. p. 387. 53.
Kirby, Mon. Ap. Angl. ii. 224. 37.
Apis bidentata, *Panz. Faun. Germ.* 59. 7?
Cœlioxys conica, *Latr. Gen. Cr. Ins.* iv. 167 ♂ ♀.
Zett. Ins. Lapp. p. 468. 1.
St. Farg. Hym. ii. 517. 1.
Nyland. Revis. Ap. Boreal. p. 278. 2.
Eversm. Bull. Mosc. xxv. 75. 1.
Cœlioxys quadridentata, *Smith, Zool.* iii. 1151. 1 ♂ ♀.
Cœlioxys umbrina, *Smith, Zool.* iii. 1153. 4. var. ♂.
Cœlioxys acuta, *Nyland. Ap. Boreal.* 250. 1. f. 10.

Hab. Britain; France; Germany; Austria; Russia; Denmark; Sweden; Finland; United States; Trenton Falls. (E. Doubleday.)

2. Cœlioxys simplex. B.M.

Cœlioxys simplex, *Nyland. Revis. Ap. Boreal.* p. 279. 6.
Cœlioxys punctata, *St. Farg.*?

Hab. Britain; France, &c.; Sweden.

3. Cœlioxys brevis.

Cœlioxys brevis, *Eversm. Bull. Mosc.* xxv. 77. 4.

Hab. Russia.

4. Cœlioxys rufescens. B.M.

Cœlioxys rufescens, *St. Farg. Hym.* ii. 519. 2.
Blanch. Hist. Nat. des Ins. iii. 413.
Smith, Zool. iii. 1152. 3.
Nyland. Revis. Ap. Boreal. p. 273. 3.
Cœlioxys hebescens, *Nyland. Ap. Boreal.* p. 251. 2.

Hab. Britain; France; Germany; Denmark; Sweden.

5. Cœlioxys apiculata. B.M.

Cœlioxys apiculata, *Nyland. Ap. Boreal.* p. 253. 4. f. 13.

Hab. Britain.

6. Cœlioxys vectis. B.M.

Cœlioxys vectis, *Curtis, Brit. Ent.* viii. tab. 349.

Cœlioxys vectis, *Smith, Zool.* iii. 1152. 2.
Cœlioxys temporalis, *Nyland. Ap. Boreal.* p. 253. 4. f. 13.
Hab. Britain; Jersey; France; Denmark; Sweden.

7. CŒLIOXYS LANCEOLATA.

Cœlioxys lanceolata, *Nyland. Revis. Ap. Boreal.* p. 279. 5.
Hab. Sweden.

8. CŒLIOXYS TRIDENTATA.

Cœlioxys tridentata, *Nyland. Ap. Boreal.* p. 254. 5; *Revis. Ap. Boreal.* p. 278. 1.
Hab. Sweden; Finland.

9. CŒLIOXYS MANDIBULARIS.

Cœlioxys mandibularis, *Nyland. Ap. Boreal.* p. 252. 3.
Hab. Sweden; Finland.

10. CŒLIOXYS PUNCTATA.

Cœlioxys punctata, *St. Farg. Hym.* ii. 520. 3.
Hab. France (Paris).

11. CŒLIOXYS ELONGATA.

Cœlioxys elongata, *St. Farg. Hym.* ii. 522. 4.
Hab. France (Paris).

12. CŒLIOXYS RUFOCAUDATA. B.M.

Cœlioxys octodentata, *St. Farg. Hym.* ii. 524. 6, nec *Say.*
Hab. France.

13. CŒLIOXYS ACANTHURA.

Anthophora acanthura, *Illig. Mag.* v. 105. 7.
Eversm. Bull. Mosc. xxv. 76. 3.
Hab. Russia.

14. CŒLIOXYS CONOIDEA.

Cœlioxys conoidea, *Illig. Mag.* v. 105. 3.
Eversm. Bull. Mosc. xxv. 76. 2.
Hab. Russia.

15. CŒLIOXYS FARINOSA. B.M.

Female. Length 5¼ lines.—Black, the flagellum, except the

basal joint and the extreme apex of the apical one, the mandibles and legs red, the face densely covered with snow-white pubescence, the entire insect as it were powdered with white scales, lines of the same traversing the collar, margins of the scutellum and epaulets of the tegulæ; the entire thorax beneath and on the sides, the legs in front and the entire abdomen beneath densely covered with white scales; the transverse bands on the abdomen above cover both the apical and basal margins of the segments, widening and uniting at the sides, the margin of the base of the abdomen has an interrupted band; the superior plate of the apical segment is short, rounded gradually at the sides to the apex, which is furnished with a short acute spine, from which a sharp carina passes forwards half-way towards the base of the segment; the ventral plate is longer than the upper one and is rounded at its apex; the abdomen is more or less red beneath, sometimes entirely so.

Hab. Turkey.

16. Cœlioxys caudata. B.M.

Cœlioxys caudata, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 535.

Hab. Egypt; Albania; South of France.

Our specimens differ slightly from the type, but not sufficiently to justify making a distinct species unless a larger number could have been examined.

17. Cœlioxys elytrura.

Cœlioxys elytrura, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 532.

Hab. Egypt.

18. Cœlioxys rufiventris.

Cœlioxys rufiventris, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 531. 73.

Hab. Egypt.

19. Cœlioxys decipiens.

Cœlioxys decipiens, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 532.
Savig. Expéd. d'Egypte, pl. 4. f. 14 ♀, 15 ♂ ♀.

Hab. Egypt.

20. Cœlioxys afra.

Cœlioxys afra, *St. Farg. Hym.* ii. 525. 7.
Lucas, Explo. Sc. Algér. iii. 210. 144. pl. 9. & 10.

Hab. Algeria (Oran).

21. Cœlioxys argentea.

Cœlioxys argentea, *St. Farg. Hym.* ii. 523. 5.
Lucas, Explo. Sc. Algér. iii. pl. 9. f. 9.

Hab. Algeria (Oran).

22. Cœlioxys subdentata.

Male. Length 5 lines.—Black, head and thorax coarsely punctured, the punctures more or less confluent; the face and cheeks densely clothed with white pubescence. Thorax, beneath, the sides and the metathorax clothed with white pubescence; the femora beneath, and the tibiæ and tarsi above, have a clothing of very short white pubescence; the extreme apex of the tibiæ and the tarsi ferruginous; the wings fusco-hyaline, palest towards their base, darkest at their apical margins; the tegulæ and nervures black; the posterior margin of the scutellum subangular, having a short tooth in the middle and another short obtuse one on each side. Abdomen shining, the punctures scattered; the apical margins of the segments have bands of white pubescence, much attenuated in the middle, and broad on each side; beneath, the segments have a broad band of white pubescence; the apical segment has a short tooth on each side at the base, and is deeply concave in the middle, and produced on each side, each production armed above with three short teeth, beneath which is a longer and more acute tooth.

Hab. Cape of Good Hope. (Coll. F. Smith.)

23. Cœlioxys foveolata.

Male. Length 6 lines.—Black, head and thorax shining, covered with large distinct punctures, the face and cheeks densely clothed with very pale ochraceous pubescence. Thorax, the sides, beneath, and the collar covered with pale ochraceous pubescence; two tufts of the same at the base of the scutellum, its posterior margin rounded, and armed on each side with a stout angular tooth; the wings fuscous, palest at their base, the tegulæ and nervures black; the femora beneath, the tibiæ and tarsi above densely covered with short snow-white pubescence. Abdomen shining, strongly punctured, the apical margins of the segments having a narrow white fascia which at the sides expands into a broad angular patch, the second, third and fourth segments beneath have a broad band of the same colour; above, the second and third segments have on each side a transverse oblong pear-shaped foveola enclosed by a smooth shining ridge; the two following segments have on each side a somewhat similar shaped depression not enclosed; the apical segment has on each side at

the base a sharp spine; the apex above has four spines or teeth, the outer ones acute and divergent, the lower pair are about the same length, but less acute.

Hab. Cape of Good Hope. (Coll. F. Smith.)

24. Cœlioxys Capensis.

Female. Length 5 lines.—Black, head and thorax closely and coarsely punctured, the face and cheeks densely clothed with short silvery-white pubescence, the mandibles ferruginous, their tips black. Thorax, beneath, the sides and metathorax clothed with silvery-white pubescence, also a tuft over the tegulæ; the tegulæ and nervures of the wings black, the apex of the wings fuscous; the scutellum rounded behind, and armed on each side with a short stout tooth, curved inwards; the legs red, the apical joints of the tarsi black, the claws red; the femora beneath, and the tibiæ and tarsi above clothed with a short snow-white pubescence. Abdomen shining, covered with large scattered punctures, beneath, the margins of the segments and the apical segment ferruginous; all the segments have an uninterrupted white band of pubescence on their apical margins attenuated in the middle, the basal one sometimes interrupted; the apical segment acute, the upper plate having a sharp carina, not quite extending to its base, the sides of the plate fringed with white pubescence; the ventral plate longer than the superior, terminating in a short spine, subacute at its apex.

Male.—This sex closely resembles the female, but is more pubescent, particularly on the disk of the thorax, that on the face has a golden tinge; the apex of the abdomen armed with eight spines; the first pair are placed at the lateral angles of the fifth segment; the second pair at the basal lateral angles of the sixth segment, the apex of which is furnished with two on each side, the upper pair short and acute, the lower pair twice their length and more slender and acute.

Hab. Cape of Good Hope. (Coll. F. Smith.)

25. Cœlioxys verticalis. B.M.

Female. Length 5½ lines.—Head and thorax strongly punctured, the vertex rugose; the face covered with silvery-white pubescence. Thorax, the sides and beneath have short white pubescence; the legs dark rufo-piceous, covered above with a short white pile, the tarsi ferruginous; the wings fuscous, palest towards their base; the scutellum rounded behind and having a short obtuse tooth on each side. Abdomen moderately punctured, most strongly towards the base; all the segments have a

narrow white fascia on their basal margins, which is widened laterally and is continuous beneath; the ventral plate of the apical segment a little longer than the upper plate and rounded at the apex, the upper plate terminating in a very acute spine.

Hab. Port Natal.

26. CŒLIOXYS CARINATA.

Female. Length 5½ lines.—Head and thorax closely and strongly punctured, the face on each side covered with short white pubescence; the clypeus has a central raised carina, its anterior margin subangular. Thorax, the collar and the metathorax clothed with white pubescence; the sides, beneath, the femora beneath, and tibiæ and tarsi above, covered with a very short white pile; the apical joints of the tarsi rufo-testaceous; the wings dark fuscous, the superior wings paler towards their base; the inferior wings have their basal half hyaline; the scutellum is rounded behind and armed on each side with an angular tooth. Abdomen shining, strongly punctured, the margins of all the segments have a narrow white fascia which expands laterally into broad patches; the abdomen is rounded at the sides, the sixth segment being suddenly narrowed, forming an elongate acute spine, the lower plate rather longer than the upper, which has an elevated carina towards its apex, on each side of which it is rugose.

Hab. Port Natal. (Coll. W. W. Saunders, Esq.)

27. CŒLIOXYS TORRIDA. B.M.

Female. Length 8 lines.—Black, head and thorax very closely and finely punctured, an elevated carina passing from the anterior stemma to the base of the clypeus, channeled above; the face on each side covered with white pubescence, that on the clypeus very short and fuscous towards the anterior margin. Thorax, a delicate impressed line down the centre extending to the base of the scutellum, the punctures on the disk confluent running into striæ; a line of white pubescence on the collar, another over the tegulæ, a third along the base of the scutellum; the metathorax covered and having a tuft on each side, another on the tubercles, and the whole thorax beneath thinly covered with short pubescence of the same colour; the legs are covered with a short white pile most dense and glittering above; the wings at their base hyaline, their apical half dark fuscous having a purple lustre; the scutellum rounded behind and armed laterally with stout curved tooth. Abdomen elongate, the apical segment long and spiniform; on each side of the basal segment a patch of snow-

white pubescence notched within, a narrow line on the basal margins of the following segments expanding laterally into a broader fascia equally covering apical and basal margins; the second and third segments have towards their base laterally a short curved line of white pubescence; the whole abdomen finely punctured, most strongly so towards the base; the apical segment beneath impunctate, except a few delicate punctures at the base.

Hab. Sierra Leone. (The Rev. D. F. Morgan.)

28. Cœlioxys aurifrons. B.M.

Female. Length 3¼ lines.—Black; head and thorax very coarsely punctured, the face densely covered with golden pubescence. Thorax, the wings subhyaline, darkest towards their apical margins, the tegulæ and nervures rufo-testaceous; the legs red; the femora beneath, and the tibiæ and tarsi above, covered with a short white pile; the sides of the metathorax covered with white pubescence; the scutellum slightly rounded behind, and armed on each side with a stout bent tooth. Abdomen shining, covered with scattered punctures, most strongly so towards the base; all the segments have a narrow fascia of white pubescence on their apical margins, more or less interrupted in the centre; each segment has at the sides towards the base an impressed line; the apical segment is armed on each side with an acute spine, and with four at the apex all acute, the two lower spines being longer than the upper ones; beneath the abdomen is ferruginous at the base, and at the apex of the other segments.

Hab. Sierra Leone. (The Rev. D. F. Morgan.)

29. Cœlioxys pruinosa.

Male. Length 3 lines.—Black, head and thorax coarsely punctured, the former very large, wider than the thorax, the face densely clothed with a pale golden pubescence, that on the cheeks being snow-white; the antennæ rufo-testaceous beneath, the mandibles ferruginous, on the cheeks beneath is a deep smooth shining ovate fossulet. Thorax beneath, also the legs beneath, covered with a dense short white pile having the appearance of hoar-frost, the tarsi ferruginous; the apex of the wings fuscous, hyaline towards their base, the tegulæ and nervures black; a band of white pubescence on the collar, an epaulet of the same over the tegulæ, and a line at the base of the scutellum, the posterior margin of the latter rounded, and armed on each side with a large angular bent tooth. Abdomen shining, rather closely punctured; the apical margins have an interrupted white

band, broad and almost uniting at the sides, but much attenuated inwardly; the third, fourth and fifth segments at their basal margins have a transverse interrupted narrow band; the apical segment subquadrate, the apex ferruginous; on each side towards the base a short acute tooth, the apex having four short acute teeth above, and two below rather longer but less acute.

Hab. The Gambia. (Coll. F. Smith.)

30. Cœlioxys loricula.

Male. Length 5 lines.—Black, head and thorax coarsely punctured, the face covered with a golden pubescence, and a narrow line of white behind the eyes. Thorax, the disk covered with large oblong punctures; those on the scutellum finer, close and rounded, the posterior margin rounded, armed on each side with a stout acute tooth; the wings fuscous, palest towards their base, the tegulæ and nervures black, the thorax beneath covered with a short dense silvery-white pubescence, the femora beneath and the tibiæ and tarsi above clothed with the same. Abdomen shining, the basal segment covered with scattered punctures, a few at the base and apex of the following; the basal segment has laterally a short marginal fascia, and the apical margins of the following segments a very narrow fascia slightly widening laterally; the apical segment armed on each side with a short acute tooth, and with four at the apex, the upper pair rounded at their apex, the inferior pair longest and subacute.

Hab. Guinea. (Coll. W. W. Saunders, Esq.)

31. Cœlioxys fuscipennis.

Female. Length 5 lines.—Black, the head and thorax strongly punctured, the sides of the face and cheeks densely covered with snow-white pubescence, the clypeus thinly covered. Thorax, a spot behind the wings, the metathorax on the sides, and a large patch beneath the wings of white pubescence; the femora beneath and the tibiæ and tarsi above have a covering of very short white pubescence, the legs rufo-testaceous, wings dark fuscous, subhyaline towards their base, the nervures black, the scutellum behind rounded and armed on each side with a short blunt tooth diverging outwards. Abdomen shining, the basal segment strongly and closely punctured, the punctures scattered on the other segments; the apical one very finely punctured; the segments have very narrow white marginal bands widened at the sides; beneath, they are narrow and interrupted in the middle; the superior plate of the apical segment is carinated in the middle and acute

at the apex; the ventral plate is longer than the upper one and gradually narrows to an acute point.

Hab. India. (Coll. J. S. Baly, Esq.)

32. Cœlioxys ducalis, n. s.

Female. Length 11 lines.—Black, the head clothed with a dense short bright fulvous pubescence, that on the cheeks is fuscous; the thorax above rugose, and having a slightly elevated carina passing from the collar to the middle of the scutellum, on each side of which is a bent tooth; the wings dark fuscous, having a splendid purple and coppery reflection, the posterior wing hyaline towards the base. The abdomen is strongly punctured, most sparingly so on the disk; the apical segment finely punctured.

Hab. India? (Coll. W. W. L. Walcott, Esq.)

33. Cœlioxys apicata.

Female. Length 5½–6 lines.—Black, head and thorax strongly but not coarsely punctured, the face clothed with short white pubescence; that on the cheeks, vertex, collar, sides of the thorax, and metathorax, is also white; the wings subhyaline, their apex clouded, the scutellum rounded behind and subdentate on each side. Abdomen shining, towards the base rather distantly punctured, more finely and closely so towards the apex; the superior plate of the apical segment broad and rounded at the apex, slightly notched at the sides, carinated down the centre and terminating in a slender acute spine; the inferior plate a little longer than the upper one, very broad and rounded at the apex.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

34. Cœlioxys capitata. B.M.

Female. Length 3 lines.—Head very large, and as well as the thorax, coarsely punctured; the face and cheeks covered with snow-white pubescence, antennæ beneath rufo-testaceous, tips of the mandibles ferruginous. Thorax, two spots on the prothorax, one over the tegulæ and two on the basal margin of the scutellum of white scales; the thorax on the sides and beneath, the femora beneath, and tibiæ and tarsi above, also covered with white scales, the legs ferruginous; the wings fusco-hyaline, darkest towards their apical margins, the nervures fusco-ferruginous; the scutellum rounded behind and armed on each side with a short stout tooth. Abdomen shining, the punctures distinct but scattered, most dense at the base; all the segments

have a marginal fascia of snow-white scales; in the centre the bands are formed of single scales placed longitudinally, at the sides the bands are much widened and are continued beneath, both above and below usually more or less interrupted; the abdomen is rufo-testaceous beneath; the superior plate of the apical segment gradually narrows to a point, has a short carina towards the apex, and a white spot on each side about the middle; the lower plate is nearly twice the length of the upper, gradually tapering and notched at its apex.

The male only differs in the apical segment of the abdomen which is armed with eight spines, a short acute one on each side at the base, four short acute ones in a row at the apex above, and two longer ones beneath; there is also a very minute one on the apical margins of the fifth segment at its extreme lateral angles.

Hab. Northern India; North Bengal; Ceylon.

35. Cœlioxys vidua.

Female. Length 4¼ lines.—Black, the face covered with very short pale ochraceous pubescence, the mandibles and scape of the antennæ ferruginous. Thorax, a line on the collar, an epaulet over the tegulæ, and a line at the base of the scutellum of ochraceous pubescence; the legs red, the tibiæ and tarsi above, and femora beneath covered with a short white pile; the scutellum produced in the middle into an angular tooth, and armed on each side with a stout tooth; the disk covered with large distinct punctures, the tegulæ red, the apex of the wings fuscous. Abdomen, the first segment above, the second and third laterally, and the whole beneath red; all the segments margined with pale ochraceous bands, continuous beneath; the superior plate of the anal segments rounded at its extremity and having a central carina extending nearly to its base; the inferior plate a little longer than the superior one, its apex terminating in a broad acute tooth, on each side of which it is notched, forming two short acute teeth.

Hab. Brazil. (Coll. F. Smith.)

36. Cœlioxys carinata.

Female. Length 5 lines.—Black, the face on each side densely covered with short yellowish-white pubescence, the mandibles ferruginous, their tips black. The thorax shining on the disk, nearly impunctate anteriorly, becoming deeply punctured towards the scutellum, the punctures large and not very close, the scutellum punctured on each side, its posterior margin angular, ferruginous at the point; on each side is a stout tooth; the tegulæ ferruginous, the wings subhyaline, gradually becoming

fuscous towards their apical margins, the nervures dark ferruginous; the legs, abdomen beneath and base above, ferruginous; the abdomen shining, punctured at the base, and on the basal margins of the segments laterally; otherwise, the punctures widely scattered; an indistinct carina runs down the middle of the abdomen, becoming raised and decided on the apical segment, the upper plate of which is a little shorter than the lower one, which is acute at the apex and slightly notched on each side; beneath, the abdomen has a similar undefined carina down the centre.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

37. Cœlioxys similllima. B.M.

Female. Length 4¼ lines.—Very similar to *C. tridentata*, but the scape is entirely black, the thorax is not produced in the middle, the anal valve has the inferior plate produced into a more elongate spine and is not notched at the sides; in other respects it corresponds with that species, of which it possibly may be a mere variety; the male is not known; it may also be a variety of the *prætexta* of Haliday, but the description of that species is too short to be at all relied upon in this variable genus.

Hab. Brazil.

38. Cœlioxys lævigata. B.M.

Male. Length 4½ lines.—Black, very smooth and shining; on the head and thorax the punctures are large and scattered, on the abdomen they are finer and cover the basal segment, and the base of all the following, a transverse line towards the margins of each, the intervening portions being smooth and shining; the face covered with very pale fulvous pubescence; the tegulæ and legs bright ferruginous; the wings subhyaline, their apical margins have a fuscous cloud, as well as the upper half of the marginal cell; the nervures black; the scutellum impunctate, produced in the middle into a broad spine, which is rounded at its apex; on each side an elongate smooth spine; the apical segment of the abdomen armed with six acute spines, one on each side about the middle; four at the apex, two on each side, of which the two lower spines are the longest; all the segments have a narrow white marginal fascia a little widened at the sides and beneath, and more or less interrupted above; the apical margins of the ventral segments ferruginous.

Hab. Para.

39. Cœlioxys zonula. B.M.

Female. Length 6–7½ lines.—Head and thorax black, the

head densely clothed with a short scale-like pubescence, the vertex naked; a transverse line of fuscous pubescence on the face, in a line with the anterior stemma; the disk of the thorax coarsely punctured, the scutellum rugose, having on each side a stout tooth; a continuous line of whitish pubescence passes over the collar, tegulæ, and base of the scutellum; the thorax on the sides and beneath covered with a very short snow-white pubescence; the legs red, and having behind a line of snow-white pubescence; the tegulæ red, the wings fusco-hyaline, their apical margins fuscous, a narrow cloud passing along the superior margin of the marginal cell; the nervures dark fuscous. Abdomen, the three basal segments red, and, except the apical segments, entirely red beneath; all the margins of the segments have a narrow fringe of short snow-white pubescence; a broad patch of the same in the middle of the basal ventral segment; the superior plate of the apical segment pointed, and having a central carina fringed with fuscous pubescence; the ventral plate longer than the superior, acute at the apex, having a fringe of dark fuscous pubescence on the sides.

Male.—This sex closely resembles the female, the apical segment denticulate, a short tooth on each side, the apex being quadridentate, the lower pair of teeth longest and acute.

Hab. Brazil (Santarem).

40. Cœlioxys rufopicta.

Male. Length 6¼ lines.—Black, the vertex of the head coarsely punctured, the face covered with a pale golden-yellow pubescence, the mandibles ferruginous in the middle. Thorax shining, sparingly punctured in the centre, but more thickly and strongly at the sides; the prothorax elevated, the scutellum smooth and shining, having on each side a few large punctures, its posterior margin slightly produced in the middle and armed on each side with an obtuse tooth diverging outwards; the wings fusco-hyaline, having irregular transparent spaces; the legs ferruginous, the femora being more or less fuscous. Abdomen elongate, rather strongly punctured at the base, but much more finely towards the apex; a bright ferruginous spot on each side of the basal segment, the apical margins of the segments beneath, ferruginous; all the margins have a narrow marginal fascia, more or less interrupted above; the ventral segments have a central carina which extends from the base to the apex of the fourth segment; at its termination are two short acute spines; the apex armed with six teeth, a short acute one on each side,

and two pairs at the apex, of which the upper ones are very short and acute.

Hab. South America. (Coll. W. W. Saunders, Esq.)

41. Cœlioxys Cayennensis.

Cœlioxys Cayennensis, *Spin. Ann. Soc. Ent. Fr.* x. (1841) 144. 95; *Faun. Chili.* vi. 190. 1.

Hab. Cayenne. (Coll. W. W. Saunders, Esq.)

42. Cœlioxys prætexta.

Cœlioxys prætexta, *Halid. Linn. Trans.* xvii. 320. 15 (1837).

Hab. St. Catherine's. (Coll. W. W. Saunders, Esq.)

43. Cœlioxys abdominalis. B.M.

Cœlioxys abdominalis, *Guér. Icon. Règ. Anim. Ins.* 453.

Hab. Isle of St. Thomas.

44. Cœlioxys rufipes.

Cœlioxys rufipes, *Guér. Icon. Règ. Anim. Ins.* 452. tab. 73. f. 9.

Hab. Cuba.

45. Cœlioxys modesta. B.M.

Female. Length 4¼ lines.—Black, head and thorax covered with large distinct punctures, the face covered with white pubescence. Thorax, a line on the collar, a spot behind the tegulæ, and a line at the base of the scutellum of white pubescence; the sides of the metathorax have some long white hairs, and the legs above are covered with very short white pubescence, the legs rufo-testaceous, as well as the tegulæ and nervures of the wings, the latter fusco-hyaline, darkest towards their apical margins; the scutellum rounded behind and armed on each side with a short bent tooth. Abdomen shining, the punctures scattered, all the segments have fasciæ of white pubescence, frequently interrupted; the apical segment has the lower plate broad, rounded at the apex, and having a minute point in the middle, the margins of the plate fringed with fuscous pubescence.

Hab. United States.

46. Cœlioxys rufitarsus. B.M.

Male. Length 5¼ lines.—Black, the head and thorax coarsely punctured, the face covered with white pubescence, the cheeks and the thorax beneath have a long white pubescence as well as

the sides of the metathorax, the tegulæ testaceous in the middle, the wings subhyaline, their nervures ferruginous, all the tarsi bright ferruginous; the apical margins of all the segments have a white marginal fascia; the fifth segment has on its apical margin laterally a short blunt tooth, the sixth has a more acute one on each side in the middle, the apex having four teeth, placed two above and two beneath, the latter being the longest and most acute.

Hab. United States.

47. Cœlioxys 8-dentata. B.M.

Cœlioxys 8-dentata, *Say, Keating's Voy. St. Peter's Riv. App.* 84; *Bost. Journ. Nat. Hist.* i. 400. 1.

Hab. N. America (N.W. Arkansas; Pennsylvania).

48. Cœlioxys alternata.

Cœlioxys alternata, *Say, Bost. Journ. Nat. Hist.* i. 401. 2.

Hab. N. America (Indiana).

49. Cœlioxys dubitata. B.M.

Female. Length 5¼ lines.—This insect exactly resembles *C. rufitarsus*, differing, as usual in the sex, in having the abdomen conical; the upper plate of the apical segment being suddenly narrowed at half its length, forming on each side a sharp angle, from which it gradually narrows to the apex, which is subacute; the lower plate is lanceolate, very slightly notched on each side towards the apex.

Hab. St. John's Bluff, East Florida. (R. Foster, Esq.)

50. Cœlioxys funeraria. B.M.

Male. Length 5 lines.—Black, head and thorax strongly and very closely punctured, the face covered with snow-white pubescence; the thorax has some long white pubescence on the collar, metathorax beneath, and on the sides; wings subhyaline, the nervures ferruginous, the tarsi ferruginous; the scutellum rounded at its posterior margin and armed on each side with a short bent tooth. Abdomen shining, closely and rather strongly punctured; all the segments have a snow-white band on their apical margins, which is narrow in the middle and gradually widened towards the lateral margins and continued uninterruptedly on the ventral segments; the apex armed with six teeth, placed one on each side, and four at the apex placed two above and two below, the lower pair longest and acute.

Hab. Canada.

This species closely resembles the *C. vectis*, but differs in having snow-white pubescence on the face, continuous bands on the abdomen, and also in wanting the transverse depressions on each segment; the fifth segment also is not produced at its apical lateral margins.

Genus 29. DIOXYS.

Trachusa, pt., *Jurine, Hym.* p. 253.
Heriades, pt., *Spin. Ins. Lig.* fasc. 3. p. 198.
Dioxys, *St. Farg. & Serv. Ency. Méth.* x. 109.

1. Dioxys cincta.

Trachusa cincta, *Jurine, Hym.* p. 253. t. 12. f. 36.
Heriades cincta, *Spin. Ins. Lig.* fasc. 3. p. 198. 2.
Dioxys cincta, *St. Farg. & Serv. Ency. Méth.* x. 109. 1.
St. Farg. Hym. ii. 514. 2.

Hab. South of France; Italy.

2. Dioxys Pyrenaica.

Dioxys Pyrenaica, *St. Farg. Hym.* ii. 515. 3.
Lucas, Explo. Sc. Algér. iii. 206. 138.

Hab. The Pyrenees (Barèges); Algeria (Oran).

3. Dioxys rufiventris. B.M.

Dioxys rufiventris, *St. Farg. Hym.* ii. 516. 4.
Lucas, Explo. Sc. Algér. iii. 207. 139. t. 9. f. 5.

Hab. Algeria (Oran).

4. Dioxys maura.

Dioxys maura, *St. Farg. Hym.* ii. 516. 5.
Lucas, Explo. Sc. Algér. iii. 208. 141. t. 9. f. 7.

Hab. Algeria (Oran).

5. Dioxys dimidiata.

Dioxys dimidiata, *St. Farg. Hym.* ii. 514. 1.

Hab. Versailles.

6. Dioxys chalicoda. B.M.

Dioxys chalicoda, *Lucas, Explo. Sc. Algér.* iii. 207. 140. t. 9. f. 6.

Hab. Algeria (Oran).

Genus 30. STELIS.

Apis, pt., *Kirby, Mon. Ap. Angl.* i. 154 (1802).
Megilla, pt., *Fabr. Syst. Piez.* p. 328 (1804).
Megachile, pt., *Latr. Hist. Nat.* xiv. 51 (1805).
Stelis, *Panz. Krit. Revis.* ii. (1806).
Latr. Gen. Cr. Ins. iv. 163 (1806).
Trachusa, pt., *Jurine, Hym.* (1807).
Gyrodroma, *Klug, Illig. Mag.* vi. (1807).

1. STELIS ATERRIMA. B.M.

Apis aterrima, *Panz. Faun. Germ.* 56. 15.
Apis punctulatissima, *Kirby, Mon. Ap. Angl.* ii. 231. 39. t. 16. f. 9.
Megilla aterrima, *Fabr. Syst. Piez.* p. 331. 15.
Megachile punctatissima, *Latr. Hist. Nat.* xiv. 54.
Spin. Ins. Lig. fasc. 1. p. 135. 3.
Trachusa aterrima, *Jurine, Hym.* p. 253.
Stelis aterrima, *Panz. Krit. Revis.* ii.
Latr. Gen. Cr. Ins. iv. 163.
Blanch. Hist. Nat. Ins. iii. 413.
St. Farg. Hym. ii. 527. 1.
Smith, Zool. iii. 1154. 1.
Nyland. Ap. Boreal. i. 274. 1.
Eversm. Bull. Mosc. xxv. 86. 1.
Gyrodroma aterrima, *Klug, Illig. Mag.* vi. 225.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

2. STELIS PHÆOPTERA. B.M.

Apis phæoptera, *Kirby, Mon. Ap. Angl.* ii. 232. 40.
Megachile phæoptera, *Latr. Hist. Nat.* xiv. 54. 6.
Spin. Ins. Lig. fasc. 1. p. 136. 4.
Stelis phæoptera, *St. Farg. Hym.* ii. 527. 2.
Smith, Zool. iii. 1154. 2.
Nyland. Ap. Boreal. 274. 1.
Eversm. Bull. Mosc. xxv. 87. 2.

Hab. Britain; France; Italy; Germany; Denmark; Sweden; Finland.

3. STELIS MINUTA. B.M.

Stelis minuta, *St. Farg. Ency. Méth.* x. 481. 1; *Hym.* ii. 529. 3 ♀.
Dufour, Ann. Soc. Ent. Fr. ix. 34 (1840).
Smith, Zool. iii. 1155. 4.

Hab. Britain; France.

4. STELIS BREVIUSCULA.

Stelis breviuscula, *Nyland. Ap. Boreal. Supp.* p. 106.

Hab. Sweden.

5. STELIS 8-MACULATA.

Stelis octomaculata, *Smith, Zool.* iii. 1155. 3 ♂ ♀.
Stelis ornatula, *Nyland. Ap. Boreal. Supp.* p. 106.

Hab. Britain; Sweden.

6. STELIS ABERRANS.

Stelis aberrans, *Eversm. Bull. Mosc.* xxv. 87. 3.

Hab. Russia.

7. STELIS OBESA.

Stelis obesa, *Say, Bost. Journ. Nat. Hist.* i. 398.

Hab. North America (Indiana, United States).

8. STELIS FŒDERALIS. B.M.

Female. Length 2¼ lines.—Black, the face covered with griseous pubescence, the flagellum rufo-piceous; the thorax as well as the head strongly punctured, the former has a scattered griseous pubescence, the wings fusco-hyaline, the apical margins of the wings faintly clouded, the apical joints of the tarsi dark ferruginous. Abdomen ovate, shining and closely punctured, the basal segment having on each side a somewhat pear-shaped yellowish-white macula; the four following segments have across the middle a slightly interrupted narrow fascia, the sixth immaculate, its margin entire, rounded.

Male.—Closely resembling the female, the face being more densely pubescent; the five basal segments of the abdomen having a subinterrupted fascia of the same colour as in the female, the fasciæ on each side are sinuated on their inferior margins; the apical segment rounded.

Hab. United States.

9. STELIS CARBONARIA. B.M.

Female. Length 4 lines.—Black, closely and strongly punctured, the head and thorax opake; the abdomen shining, more finely and distantly punctured, the face covered with white pubescence; wings dark fuscous, palest towards their base; the scutellum rounded, and produced behind over the base of the abdomen and covered with large punctures; in the middle of the

posterior margin a deep depression. Abdomen curved, and having a scattered griseous pubescence, the apex rounded.

The male resembles the female, but has the apical segment of the abdomen tridentate.

Hab. East Indies; N. Bengal; Ceylon.

Genus 31. CROCISA.

Nomada, pt., *Fabr. Ent. Syst.* ii. 345 (1793).
Melecta, pt., *Fabr. Syst. Piez.* p. 385 (1804).
Crocisa, *Jurine, Hym.* p. 239 (1807).

The mentum and labrum of about equal length; the labial palpi five-jointed; the basal joint elongate, full half the length of the mentum, the second not half the length of the basal joint, the third about half the length of the second; the two apical joints minute, placed near the apex of the third; the paraglossæ elongate, slender, rather longer than the basal joint of the labial palpi. Maxillary palpi two-jointed. The superior wings having one marginal and three submarginal cells, the second restricted towards the marginal, receiving the first recurrent nervure a little beyond the middle, the third receiving the second recurrent nervure at its apex.

Type. *Crocisa histrio.*

1. CROCISA HISTRIO. B.M.

Nomada histrio, *Fabr. Ent. Syst.* ii. 345. 1.
Melecta histrio, *Latr. Hist. Nat. Ins.* iii.
Fabr. Syst. Piez. p. 385. 1.
Spin. Ins. Lig. fasc. 1. p. 153. 1.
Crocisa histrio, *Latr. Gen. Cr. Ins.* iv. 172.
St. Farg. Hym. ii. 454. 1.
Lucas, Hist. Nat. des Ins. iii. 411.
Eversm. Bull. Mosc. xxv. 104. 1.

Hab. India; France; Russia; Algeria.

2. CROCISA SCUTELLARIS. B.M.

Nomada scutellaris, *Fabr. Ent. Syst.* ii. 346. 2.
Panz. Faun. Germ. 32. 7.
Melecta scutellaris, *Fabr. Syst. Piez.* p. 387. 4.
Spin. Ins. Lig. fasc. 1. p. 153. 2.
Melecta histrionica, *Illig. Mag.* ?
Crocisa histrionica, *Latr. Gen. Crust. Ins.* iv. 172.
Crocisa scutellaris, *St. Farg. Hym.* ii. 453. 7.

Hab. France; Germany; Italy; Spain; Albania; Siberia; Turkey; Ceylon; Africa.

3. CROCISA NITIDULA. B.M.

Melecta nitidula, *Fabr. Syst. Piez.* p. 386. 2.
Crocisa nitidula, *Latr. Gen. Crust. Ins.* iv. 172.
St. Farg. Hym. ii. 448. 1.
Crocisa pulchella, *Guér. Icon. Règ. Anim.* p. 454. t. 74.

Hab. Amboina; New Holland (Richmond River).

4. CROCISA SPLENDIDULA. B.M.

Crocisa splendidula, *St. Farg. Hym.* ii. 449. 2.

Hab. South Africa.

5. CROCISA EMARGINATA. B.M.

Crocisa emarginata, *St. Farg. Hym.* ii. 449. 3.

Hab. Port Natal.

6. CROCISA LAMPROSOMA. B.M.

Crocisa lamprosoma, *Boisd. Voy. de l'Astr.* p. 653. t. 12. f. 4.
Crocisa Novæ-Hollandiæ, *St. Farg. Hym.* ii. 450. 4.

Hab. Vanikoro? Hunter River, Australia.

7. CROCISA RAMOSA. B.M.

Crocisa ramosa, *St. Farg. Hym.* ii. 451. 5.
Brullé, Hist. Nat. Il. Canar. ii. 89. 40.
Lucas, Explo. Sc. Algér. iii. 212. t. 10. f. 1.
Crocisa orbata, *St. Farg. Hym.* ii. 452. 6 (var.?).

Hab. France; Albania; Canary Islands; Algeria.

8. CROCISA DECORA. B.M.

Crocisa decora, *Smith, Trans. Ent. Soc.* new ser. ii. p. 41.

Hab. North China. (R. Fortune, Esq.)

9. CROCISA PICTA. B.M.

Female. Length 7 lines.—Black, the face and cheeks covered with a pale blue pubescence; the margin of the vertex has a fringe of pale blue pubescence, and the thorax an interrupted line on the collar; a round spot on each side of the scutellum at its base, a line on the prothorax reaching the middle of the disk, and a round spot on each side of bright blue pubescence; a large spot of the same beneath the wings, a smaller one on the breast, and all the tibiæ and tarsi covered with pubescence of the same colour; the wings dark fuscous and having a violet irides-

cence, subhyaline towards their base; sometimes a spot of blue pubescence on the scutellum at its notch in the middle. Abdomen, a large subquadrate spot on each side at the base, emitting a short line from its apex within; the four following segments have on each side a broad line of blue pubescence; beneath, the second, third, and sometimes the fourth segments have a small spot on each side of similar pubescence.

Hab. Port Natal.

Genus 32. LIOGASTRA.

Liogastra, *Perty, Delec. Anim. Art.* p. 146.
Rathymus, *St. Farg. Hym.* ii. 539.

The labial palpi four-jointed; the first joint about the same length as the mentum, the second joint rather more than half the length of the first; the two apical joints minute, placed at the side of the second joint nearly at its apex. The maxillary palpi obsolete; the mentum half the length of the labium; the paraglossæ short, acute at their apex, narrowed at their base. The superior wings having one marginal and three submarginal cells; the former as long as the three latter, rounded at its apex; the first submarginal cell a little longer than the second; the second and third of about equal length, the latter narrowed considerably towards the marginal; the two recurrent nervures uniting with the second and third transverse cubital nervures; the antennæ filiform, the scape short, much narrowed at the base, the ocelli placed in a slight curve on the vertex; the calcaria and claws of the tarsi simple.

1. LIOGASTRA BICOLOR. B.M.

Liogastra bicolor, *Perty, Del. An. Art.* p. 147. t. 28. f. 7.
Rathymus bicolor, *St. Farg. Hym.* ii. 540. 1.

Hab. Brazil.

2. LIOGASTRA UNICOLOR. B.M.

Female. Length 8 lines.—Ferruginous, antennæ black, except the scape and two basal joints of the flagellum, which are ferruginous; the face, margin of the vertex and legs have a changeable golden pubescence; the collar and sides of the metathorax have a line of white pubescence; the scutellum elevated, bituberculate; the intermediate tibiæ at their apex above produced into a short acute spine; wings dark fuscous, having a violet iridescence; the legs of a paler red than the body.

Hab. Brazil (Para). (H. W. Bates.)

3. LIOGASTRA ATRA. B.M.

Male. Length 8 lines.—Black, the second joint of the flagellum rufo-testaceous; the sides of the face covered with fuscous pubescence; the wings fusco-hyaline; the scutellum elevated, bituberculate; the disk of the thorax covered with short velvety pubescence. Abdomen naked above, except the sides of the three apical segments, which are clothed with fusco-ferruginous pubescence; the abdomen has a slight blue tinge at its base.

Hab. Brazil (Para). (H. W. Bates.)

Genus 33. EURYTIS, n. g.

(*F. Smith's MSS.*)

The labial palpi four-jointed, the first joint more than twice the length of the second, the two apical ones very minute; the maxillary palpi consisting of a single joint; the ocelli placed in a line on the vertex, the antennæ filiform. The superior wings having one marginal and three submarginal cells; the former equal in length to the three latter, the second slightly narrowed towards the marginal, the third curved and of equal width; the two recurrent nervures uniting with the second and third transverse cubital nervures; the calcar of the intermediate tibiæ elongate, very stout and denticulate at its apex. Destitute of pollinigerous organs.

1. EURYTIS FUNEREUS. B.M.

Female. Length 7 lines.—Black, entirely clothed with short velvety pubescence; wings of a purple-black. The calcar of the intermediate tibiæ elongate, bidentate at its apex; the calcar is rounded exteriorly and flattened beneath, the edges finely serrated; the calcaria on the posterior tibiæ are also flattened beneath and the edges serrated. Abdomen acute at its apex, the pubescence having a gloss similar to velvet, of a somewhat bluish tinge, the apical segment beneath having a central longitudinal carina.

Hab. Brazil (Santarem). (H. W. Bates.)

Genus 34. MELISSÁ, n. g.

(*F. Smith's MSS.*)

The labium rather more than twice the length of the mentum, which is rounded at the base and trifid at the apex; the paraglossæ short, lanceolate; the labial palpi four-jointed, the first

joint more than twice the length of the second, the two apical joints minute. The maxillary palpi three-jointed, the basal joint minute, the second twice the length of the third. The antennæ filiform, the ocelli placed in a line on the vertex. The anterior wings having one marginal and three submarginal cells, the second submarginal much contracted towards the marginal, the third slightly so. The calcaria of the intermediate tibiæ enlarged, forming stout spines which are denticulate at their apex; the anterior tibiæ have their calcaria bifid.

1. MELISSA RUFIPES. B.M.

Crocisa rufipes, *Perty, Del. An. Art.* p. 149. t. 28. f. 10 ♂.
Mesocheira azurea, *St. Farg. et Serv. Ency. Méth.* x. 106. 2.
Mesoplia azurea, *St. Farg. Hym.* ii. 457. 1.

Hab. Brazil (Para); Jamaica.

2. MELISSA DECORATA. B.M.

Female. Length 6 lines.—Head and thorax black, splendidly decorated with glittering pubescence (or scales) of a vivid green colour on the vertex, clypeus, disk of the thorax, tegulæ, tubercles and a spot beneath them, also on the legs above; the face on each side, and the head behind, covered with white pubescence; the white has a yellow tinge towards the vertex of the eyes; the collar, sides of the thorax and metathorax, the anterior tibiæ in front, a line from the collar to the middle of the disk, a round tuft on each side, and an epaulet over the tegulæ, of short dense white pubescence; on the scutellum are two elevated conical tubercles; the wings subhyaline, the nervures black, the tips of the wings have a dark fuscous cloud; the calcaria on the intermediate tibiæ bifurcate at their apex, the anterior spine has two sharp teeth within. Abdomen, of a dark blue, changing to black in certain lights, the apical margin of each segment having a broad band of pale glittering blue-green, the bands formed of minute scales as in the Lepidoptera; the segments have at their extreme lateral margins a spot of silvery-white pubescence; the entire insect beneath of dark purple-black, the abdomen being naked.

Hab. Brazil. (H. W. Bates.)

3. MELISSA REGALIS. B.M.

Female. Length 8 lines.—Head and thorax black, the vertex and disk of the thorax, scutellum and legs above, obscurely decorated with green pubescence (or scales), the face, vertex and cheeks densely covered with short white pubescence; the scape

of the antennæ black, the flagellum ferruginous beneath, fuscous above; the margin of the prothorax has a line of white pubescence, a similar one encircles the tubercles, another forms an epaulet over the tegulæ, a central one terminates on the disk and has an indistinct spot on each side of the same colour; on the scutellum are two raised conical tubercles; the wings dark fuscous, the nervures black; the legs have a black pubescence; the calcaria at the apex of the intermediate tibiæ have two large spines at their extremity, the anterior spine having three sharp denticulations within, the apex of the basal joint of the intermediate tarsi produced into an obtuse spine. Abdomen of a metallic green, covered above with minute scales; the extreme lateral margins of the segments covered with short white pubescence; the ventral plates have laterally on their posterior margins an angular patch of white, and the apical one an elevated longitudinal carina.

The male closely resembles the female, the antennæ are of the same length, the spur on the intermediate tibiæ is similar, but the abdomen is shorter, being incurved, the apical segment being subacute and notched in the middle. The posterior legs are more elongate than in the female, the femora and tibiæ beneath being naked, polished and concave; the tibiæ at their apex beneath have a brush of short stiff hairs, and the basal joint of the tarsi within has a clothing of the same.

Hab. Brazil (Santarem). (H. W. Bates.)

4. MELISSA ORNATA.

Mesocheira ornata, *Spin. Ann. Soc. Ent. Fr.* x. 145. 96 (1841).

Hab. Cayenne.

Genus 35. MESOCHEIRA.

Maxillary palpi obsolete, or rudimentary, consisting of a small tubercle; the labial palpi four-jointed, the mentum short, broadest at the base; the first joint of the labial palpi longer than the mentum, the second of about one-third the length of the first, the two apical joints minute, placed on the side near the apex of the second joint. The superior wings having one marginal and three submarginal cells; the former not quite the length of the three latter, rounded at its apex; the second cell subquadrate, slightly constricted, and the third considerably so, towards the marginal. The intermediate tibiæ furnished with a single spine, its apex bifid, the anterior tooth bidentate within; the spines at the apex of the posterior tibiæ serrated within.

Note.—The generic characters are given at length in conse-

quence of the errors discovered in those of St. Fargeau in the 'Histoire naturelle des Insectes'; after a careful microscopic examination of several individuals of this genus, only rudimentary palpi or a small tubercle has been found in the maxillæ; St. Fargeau gives six joints in his characters. The genera *Mesoplia*, *Hopliphora* and *Mesonychium* of St. Fargeau are stated by that author to agree with the genus *Mesocheira* in the character of the oral organs; on a careful examination of those parts they are found to differ very widely, and the difference in the number of spines which arm the large calcaria of the intermediate tibiæ cannot be considered as affording anything beyond specific distinctions.

1. MESOCHEIRA BICOLOR. B.M.

Melecta bicolor, *Fabr. Syst. Piez.* p. 386. 3.
Mesocheira bicolor, *St. Farg. & Serv. Ency. Méth.* x. 106.
Crocisa bicolor, *Jurine, Hym.* p. 241.

In this species the scutellum is produced over the base of the abdomen and deeply notched.

Hab. Brazil; Cayenne.

2. MESOCHEIRA SERICEUS.

Mesocheira sericeus, *Guér. Icon. Règ. Anim*, p. 456.

Hab. Rio Janeiro.

3. MESOCHEIRA ASTERIA.

Female. Length 5 lines.—Head and thorax black, the face covered with silvery-white pubescence, a line of similar pubescence passes along the margin of the vertex and down the outer margin of the eyes; the flagellum rufo-piceous beneath; the base of the scape ferruginous in front. Thorax, the tubercles and tegulæ in front rufo-piceous; the scutellum bituberculate; a line on the collar continued round the tubercles, and the margins of the scutellum bordered with white pubescence; at the sides of the metathorax a tuft of white pubescence; the wings hyaline at their base, and having a fuscous cloud at their apical margins, the nervures black; the spurs at the apex of the intermediate tibiæ elongate, filiform, slightly bent, and notched at the apex, one side of the notch produced into a sharp spine, the other side bidenticulate; the spines on the posterior tibiæ finely serrated within. Abdomen conical, of a beautiful bright green, having a silken texture; the sides adorned with silvery-white markings; beneath testaceous, having spots of purple colouring, the sides of

the third and fourth segments having patches of silvery pubescence.

Hab. Brazil. (Coll. F. Smith.)

Genus 36. THALESTRIA, n. g.

(*F. Smith's MSS.*)

The ocelli placed in a triangle on the vertex; the labial palpi four-jointed, the basal joint about two-thirds of the length of the mentum, the second joint half the length of the basal, both covered with scattered pubescence. The maxillary palpi have one joint, and a small tubercle at its base. The labrum transverse, rounded at its angles, and tuberculate on each side at its base. The superior wings having one marginal and three submarginal cells; the former about the length of the three latter united, rounded at its apex; the second and third submarginal cells narrowed towards the marginal, the second receiving the first recurrent nervure a little beyond the middle; the second recurrent nervure received by the third submarginal cell about one-third from its apex. The calcaria simple.

1. THALESTRIA SMARAGDINA.

Female. Length 8 lines.—Black, the face and cheeks have a dense short pale ochraceous pubescence, the clypeus more or less naked, truncate anteriorly and finely punctured, the pubescence (or scales) which decorate the thorax brilliant green; anteriorly and down the centre intermixed with black; the collar on each side, a ring surrounding the tubercles, a spot beneath the wings, an epaulet over the tegulæ, and the metathorax on each side having a tuft of pale yellowish-white pubescence; the scutellum furnished behind with two pointed tubercles, and on each side with an acute incurved spine; the legs have a green iridescence, the apex of the femora and tibiæ having tufts of white pubescence; the wings hyaline, clouded at their apical margins. Abdomen, conical and covered with a brilliant green effulgence above, changing in certain lights to black or deep green; the extreme lateral margins of the three apical segments have a narrow stripe of white pubescence; beneath, the abdomen is naked and of a changeable blue-black colour.

Male.—Rather smaller than the female, and similar in colour, the thorax having a black pubescence, intermingled with obscure green on the disk, the scutellum similarly adorned; the abdomen is brilliant as in the other sex, the second and three following

segments having a round spot of white pubescence at their extreme lateral margins.

Hab. Para. (F. Smith's Coll.)

Genus 37. CTENIOSCHELUS.

Melissoda, *St. Farg. Hym.* ii. 508 (not of *Latr.* 1841).
Ischnocera, *Shuck. Hist. Ins. Lardner Ency.* (1840).
Ctenioschelus, *Romand, Mag. Zool.* (1841).

Antennæ of the females filiform, the apical joint compressed, rounded at the apex. The maxillary palpi composed of a single joint; the labial palpi four-jointed, the basal joint elongate, the second scarcely one-third the length of the first; the two apical joints minute, placed at the side of the second at its apex; the tongue elongate, twice the length of the labial palpi. The superior wings having one marginal and three submarginal cells; the former about the length of the three latter, rounded at its apex; the first recurrent nervure uniting with the second transverse cubital nervure; the second recurrent nervure received near the apex of the third submarginal cell. The intermediate tibiæ armed at their apex with a single spur, which is furcate at the apex; the anterior spine of the furcation having three acute teeth or spines on its posterior margin; the spines at the apex of the posterior tibiæ simple. In the males, the antennæ are longer than the body, the four apical joints being clavate, and the apex of the abdomen spinose.

1. Ctenioschelus Latreillii. B.M.

Melissoda Latreillii, *St. Farg. Hym.* ii. 508. pl. 16. f. 3 ♂.
Ctenioschelus Goryi, *Romand, Mag. Zool.* 1841, p. 4. pl. 69. f. 1 ♂.

Female.—This sex is rather larger than the male, but similar in colour, and having a similar calcar on the intermediate tibiæ; the abdomen is acute at the apex, and without spines; the third, fourth and fifth ventral segments of the abdomen have laterally on their posterior margins a patch of silvery-white pubescence.

Hab. Monte-Video; Paraguay; Brazil.

Genus 38. ACANTHOPUS.

Apis, pt., *Fabr. Ent. Syst.* ii. 316 (1793).
Xylocopa, pt., *Fabr. Syst. Piez.* p. 339 (1804).
Acanthopus, *Klug, Illig. Mag.* vi. (1809).

The labial palpi four-jointed, the two apical joints minute;

the maxillary palpi obsolete, or reduced to a minute tubercle; the superior wings having one marginal and three submarginal cells, the former longer than the three latter united, rounded at its apex; the first and second submarginal cells subquadrate, oblique; the third submarginal much narrowed towards the marginal, receiving the second recurrent nervure in the middle, the first recurrent nervure uniting with the second transverse cubital nervure; posterior legs elongate and densely pubescent in both sexes. In some instances the first recurrent nervure is received a little within the third submarginal cell, but the typical form appears to unite it to the transverse nervure.

1. ACANTHOPUS SPLENDIDUS. B.M.

Apis splendida, *Fabr. Ent. Syst.* ii. 316. 4.
Coqueb. Illustr. Icon. Ins. i. t. 6. f. 6.
Apis palmata, *Ency. Méth.* iv. 68. 41.
Xylocopa splendida, *Fabr. Syst. Piez.* p. 339. 5.
Acanthopus splendidus, *Klug, Illig. Mag.* vi.
St. Farg. Hym. ii. 509. 1.
Romand, Mag. Zool. 1841, tab. 68 ♂ ♀.
Epicharis splendida, *Latr. Gen. Crust. et Ins.* iv. 178.

Hab. Cayenne; Brazil.

Genus 39. AGLAE.

Aglae, *St. Farg. Ency. Méth.* x. 105; *Hym.* ii. 438.

The labial palpi composed of two joints, the basal joint half as long again as the mentum, the second joint twice its length, its apex terminating in a sharp spine or point; the maxillary palpi composed of one joint situated on a tubercle at the side of the maxillæ. The superior wings having one marginal and three submarginal cells, the former being longer than the three latter united.

St. Fargeau gives four joints to the labial palpi, which after an examination of several specimens cannot be detected.

1. AGLAE CÆRULEA. B.M.

Aglae cærulea, *St. Farg. Hym.* ii. 439. 1; *Ency. Méth.* x. 105. 1.

Hab. Brazil (Para); Venezuela; Cayenne.

Genus 40. MELECTA.

Apis, pt., *Fabr. Syst. Ent.* p. 378 (1775).
Centris, pt., *Fabr. Syst. Piez.* p. 354 (1804).

Melecta, *Latr. Hist. Nat.* xiv. 48 (1805).
Crocisa, pt., *Jurine, Hym.* p. 239 (1807).
Symmorpha, *Klug, Illig. Mag.* vi. 227 (1807).

1. MELECTA LUCTUOSA. B.M.

Apis luctuosa, *Scop. Ann. Hist. Nat.* iv. 9.
Schrank, Ins. Aust. p. 404. 816.
Rossi, Faun. Etrus. ii. 105. 918.
Gmel. Syst. Nat. v. 2785. 127.
Apis punctata, *Fabr. Syst. Ent.* p. 385. 43; *Spec. Ins.* i. 484. 60; *Mant. Ins.* i. 304. 71; *Ent. Syst.* ii. 337. 99.
Melecta punctata, *Latr. Hist. Nat. Ins.* xiv. 48.
Fabr. Syst. Piez. p. 387. 7.
Spin. Ins. Lig. fasc. 1. 153. 3.
Brullé, Expéd. Sc. Morée, p. 342. 757.
Blanch. Hist. Nat. Ins. iii. 411. t. 6. f. 8.
Eversm. Bull. Mosc. xxv. 103. 1.
St. Farg. Hym. ii. 441. 1.
Lucas, Explo. Sc. Algér. iii. 211. 145.
Symmorpha punctata, *Klug, Illig. Mag.* vi. 227.
Melecta notata, *Illig. Mag.* viii. 99. 2.
Melecta atropos, *Newm. Ent. Mag.* ii. 514. 6 ♂.
Smith, Zool. iii. 1149. 2 ♂ ♀.
Melecta Lachesis, *Newm. Ent. Mag.* ii. 514. 5 ♀.

Hab. Britain; France; Italy; Germany; Spain; Denmark; Sweden; Russia.

2. MELECTA ARMATA. B.M.

Apis punctata, *Kirby, Mon. Ap. Angl.* ii. 219. 35.
Don. Brit. Ins. xii. 47. 376.
Andrena armata, *Panz. Faun. Germ.* 70. 22.
Centris punctata, *Fabr. Syst. Piez.* p. 360. 30?
Melecta punctata, *Illig. Mag.* v. 98. 1.
Smith, Zool. iii. 1148.
Melecta Clotho, *Newm. Ent. Mag.* ii. 513. 4 ♀.
Melecta Megæra, *Newm. Ent. Mag.* ii. 513. 2 (var. ♀).
Melecta Tisiphone, *Newm. Ent. Mag.* ii. 513. 1 (var. ♀).
Melecta Alecto, *Newm. Ent. Mag.* ii. 513. 3 ♂.

Hab. Britain; France; Germany.

3. MELECTA DIACANTHA.

Melecta diacantha, *Eversm. Bull. Mosc.* xxv. 103. 2.

Hab. Russia.

4. MELECTA ATERRIMA.

Melecta aterrima, *St. Farg. Hym.* ii. 447. 9.

Hab. France (Island of Noirmoutier). (Coll. F. Smith.)

5. MELECTA NIGRA.

Melecta nigra, *St. Farg. Hym.* ii. 446. 6.
Brullé, Hist. Nat. Isl. Canar. 89. 39.

Hab. Italy; Canary Islands; Sicily. (Coll. F. Smith.)

This species might possibly be considered an extreme variety of *punctata*, but the antennæ are longer than in that species; the specimen examined is from Sicily.

6. MELECTA BIPUNCTATA.

Melecta bipunctata, *St. Farg. Hym.* ii. 446. 7.

Hab. Italy; Tuscany.

7. MELECTA FASCICULATA.

Melecta fasciculata, *Spin. Ins. Lig.* fasc. 1. p. 45. 17. t. 1. f. 15.
Brullé, Expéd. Sc. Morée, iii. 342. 759. t. 48. f. 11.

Hab. Italy; The Morea.

8. MELECTA PLURINOTATA. B.M.

Melecta plurinotata, *Brullé, Expéd. Sc. Morée, Zool.* p. 343. 760.
St. Farg. Hym. ii. 442. 2.
Lucas, Explo. Sc. Algér. iii. 211. 146.

Hab. The Morea; Bagdad; Sicily; Spain; Algeria.

9. MELECTA FUNERARIA.

Female. Length 6 lines.—Intensely black; the face, a broad band on the collar, a tuft behind the wings, a large rounded patch on the sides of the basal segment of the abdomen, a large subquadrate one on the second, and a quadrate one on the third and fourth segments on each side, snow-white; the legs entirely black, the wings fusco-hyaline.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

10. MELECTA GRANDIS. B.M.

Melecta grandis, *St. Farg. Hym.* ii. 443. 3.
Lucas, Explo. Sc. Algér. iii. 211. 147. t. 9. f. 11.

Hab. Algeria (Oran).

11. MELECTA CHILIENSIS.

Female. Length 7 lines.—Black, a tuft on the face, the thorax above and the two basal segments of the abdomen, clothed with white pubescence, that on the apical segments dark green.

Hab. Chili. (Coll. F. Smith.)

12. MELECTA NIGRIPENNIS.

Melecta nigripennis, *St. Farg. Hym.* ii. 445. 5.

Hab. ——?

13. MELECTA TESTACEIPES.

Melecta testaceipes, *St. Farg. Hym.* ii. 447. 8.

Hab. ——?

14. MELECTA SEPTEMNOTATA.

Melecta septemnotata, *Spin. Faun. Chili.* vi. 186. 1.

Male. Length 3 lines.—The antennæ, body and legs black; the pubescence long and white on the head and thorax above; the wings hyaline, the nervures black.

Hab. Chili.

Genus 41. OSIRIS, n. g.

(*F. Smith's MSS.*)

Body elongate, naked, destitute of pollinigerous organs; maxillary palpi five-jointed, slender, the joints of about equal length, the maxillæ very long and slender, tapering to a point; mentum less than half the length of the labium, which is about half the length of the body; the labial palpi four-jointed, the basal joint very long, the second about twice the length of the two apical joints; labrum transverse, slightly emarginate anteriorly, the mandibles bidentate. The superior wings having one marginal and three submarginal cells, the first as long as the three latter, the second submarginal cell nearly quadrate, the third a little wider and narrowed towards the marginal; the basal joint of the posterior tarsi as long as the tibiæ, the following joints short, their united length less than that of the basal joint. Abdomen, the sixth segment concealed, the ventral portion of the apical segment produced, forming an elongate concave receptacle for the basal portion of the sting; the sting apparently always exserted, as long as the abdomen; the male having apparently only six segments in the abdomen, the seventh concealed.

1. OSIRIS PALLIDUS.

Male. Length 5 lines.—Pale testaceous, apex of the mandibles, eyes and flagellum fusco-ferruginous, the apical joint of the latter and towards its base beneath, ferruginous. The collar bilobate, the disk of the thorax fuscous, and having a central oblong-ovate pale testaceous macula; down the middle of the disk a slightly elevated carina, the scutellum transverse, somewhat rounded and elevated; the metathorax and femora within are pale yellow-testaceous; wings flavo-hyaline, the costal nervure fuscous, the stigma and the nervures towards the apex of the wing pale ferruginous, towards the base of the wing the nervures are darker. Abdomen elongate, pale rufo-testaceous, the apical margins of the segments slightly fuscous in the middle.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

2. OSIRIS VARIEGATUS.

Male. Length 5 lines.—Head and thorax yellow-testaceous varied with fuscous; the antennæ, face, leaving the orbits of the eyes yellow, and the base of the clypeus fusco-testaceous; an elevation between the antennæ yellow; the margin of the vertex fuscous, as well as the space behind the ocelli; between the ocelli and the eyes the vertex is yellow. The disk of the thorax, the posterior margin of the scutellum and the metathorax on each side, the trochanters and femora beneath, as well as an oblique line beneath the wings, fusco-testaceous; wings yellowish hyaline, stigma and nervures towards the apex testaceous, those towards the base of the wings darker. Abdomen elongate, fuscous, the basal margins of all the segments above and beneath yellow-testaceous.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

Genus 42. CHRYSANTHEDA.

Apis, pt., *Linn. Syst. Nat.* i. 953.
Chrysantheda, *Perty, Del. An. Art.* p. 148.
Euglossa, pt., *Guér. Icon. Règ. Anim. Ins.* p. 457.

1. CHRYSANTHEDA DENTATA. B.M.

Apis dentata, *Linn. Syst. Nat.* i. 954. 14.
Fabr. Ent. Syst. ii. 339. 108.
Euglossa dentata, *Fabr. Syst. Piez.* p. 363. 2.
Latr. Gen. Cr. Ins. iv. 180.
Guér. Icon. Règ. Anim. Ins. p. 457. t. 75. f. 2.
Sulz. Gesch. Ins. t. 27. f. 16.

Hab. Brazil; Columbia; Demerara.

2. CHRYSANTHEDA NITIDA. B.M.

Chrysantheda nitida, *Perty, Del. An. Art.* p. 148. t. 28. f. 8.

Hab. Brazil; Columbia; Demerara; Venezuela.

3. CHRYSANTHEDA FRONTALIS. B.M.

Euglossa frontalis, *Guér. Icon. Règ. Anim. Ins.* p. 458. 3.

Hab. Brazil (Para).

4. CHRYSANTHEDA SMARAGDINA. B.M.

Euglossa smaragdina, *Guér. Icon. Règ. Anim. Ins.* p. 458. 2.

Hab. Brazil.

5. CHRYSANTHEDA APPENDICULATA.

Chrysantheda appendiculata, *Romand, Ann. Soc. Ent. Fr.* 2me sér. vii. *Bull.* p. xxxvi. t. 7. f. 1 ♂.

Hab. Caraccas.

Subfam. 4. SCOPULIPEDES.

Genus 43. EUCERA.

Apis, pt., *Linn. Syst. Nat.* i. (1785).
Eucera, *Scop. Ann. Hist. Nat.* iv. (1769).
Andrena, pt., *Panz. Faun. Germ.* fasc. 78 (1804).

The maxillary palpi 4-jointed; the labial palpi 4-jointed; the superior wings having one marginal and two submarginal cells. The antennæ of the males elongate.

1. EUCERA LONGICORNIS. B.M.

Apis longicornis, *Linn. Faun. Suec.* 1684; *Syst. Nat.* i. 953. 1 ♂.
Scop. Ent. Carn. p. 794. f. 794.
Fabr. Syst. Ent. p. 388. 58.
Schäff. Icon. Ins. t. 44. f. 3.
Fourc. Ent. Par. ii. 445. 10.
Rossi, Faun. Etrus. ii. 922.
Christ. Hym. p. 142. t. 11. f. 9.
Kirby, Mon. Ap. Angl. ii. 278. 59 ♂ ♀.
Eucera longicornis, *Scop. Ann. Hist. Nat.* iv. 8. 1 ♂.
Fabr. Ent. Syst. ii. 343. 1 ♂.
Latr. Hist. Nat. xiv. 43. 1.
Brullé, Expéd. Sc. Morée, p. 334. 742.
Zett. Ins. Lapp. p. 469. 1.
Blanch. Hist. Nat. Ins. iii. 407.

Eucera longicornis, *St. Farg. Hym.* ii. 118. 3.
Smith, Zool. iv. 1449. 1.
Nyland. Ap. Boreal. p. 249. 1.
Bär, Bull. Mosc. xxiii. 530. t. 13. f. 1.
Eversm. Bull. Mosc. xxv. 119. 2.
Apis tumulorum, *Sulz. Hym.* p. 198. t. 27. f. 14 ♂.
Christ. Hym. p. 198. t. 17. f. 9.
Fabr. Ent. Syst. ii. 344. 3.
Don. Brit. Ins. v. 19. t. 151. 2.
Apis tuberculata, *Fabr. Ent. Syst.* ii. 334. 84 ♀.
Panz. Faun. Germ. 78. 19.
Apis linguaria, *Kirby, Mon. Ap. Angl.* ii. 282 ♂. 60, and *Cab. Mus. Ent. Soc.*
Eucera linguaria, *Panz. Faun. Germ.* 64. 22 ♂?
St. Farg. Hym. ii. 122. 6.
Bär, Bull. Mosc. xxiii. 534. 11. t. 13. f. 11.
Andrena strigosa, *Panz. Faun. Germ.* 64. 16 ♀.
Eucera similis, *St. Farg. Hym.* ii. 121. 4?

Hab. Europe; Algeria.

2. EUCERA DISTINCTA.

Eucera distincta, *St. Farg. Hym.* ii. 139. 31 ♂.

Hab. France.

3. EUCERA FASCIATELLA.

Eucera fasciatella, *St. Farg. Hym.* ii. 130. 19 ♂.

Hab. France (Paris, Forest of Bondy).

4. EUCERA NIGRILABRIS. B.M.

Eucera nigrilabris, *St. Farg. Hym.* ii. 116. 1.
Lucas, Explo. Sc. Algér. iii. t. 3. f. 4 ♀.
Eucera numida, *St. Farg. Hym.* ii. 117. 2, var.
Bär, Bull. Mosc. xxiii. pt. 1. p. 532. 6. t. 13. f. 6 ♂?

Hab. South of France; Algeria (Oran).

5. EUCERA NIGRIFACIES.

Eucera nigrifacies, *St. Farg. Hym.* ii. 132. 20 ♂.

Hab. Bordeaux.

6. EUCERA PUNCTILABRIS.

Eucera punctilabris, *St. Farg. Hym.* ii. 132. 21 ♂.

Hab. Bordeaux.

7. EUCERA SUBFASCIATA.

Eucera subfasciata, *St. Farg. Hym.* ii. 136. 27 ♂.

Hab. France.

8. EUCERA SUBRUFA.

Eucera subrufa, *St. Farg. Hym.* ii. 129. 17 ♂.

Hab. Lyons.

9. EUCERA BREVICORNIS.

Eucera brevicornis, *Fabr. Ent. Syst. Supp.* p. 278. 8.

Hab. Italy.

10. EUCERA ANALIS.

Eucera analis, *Bär, Bull. Mosc.* xxiii. 532. 4. t. 13. f. 4 ♂.

Hab. Russia.

11. EUCERA ALBICANS.

Eucera albicans, *Bär, Bull. Mosc.* xxiii. 532. 5. t. 13. f. 5 ♂.

Hab. Russia.

12. EUCERA BINOMINATA.

Eucera dimidiata, *Bär, Bull. Mosc.* xxiii. 531. 2. t. 13. f. 2 ♂ (not of *Brullé*).

Hab. Russia.

13. EUCERA CANTATRIX.

Eucera cantatrix, *Bär, Bull. Mosc.* xxiii. 536. 16. t. 13. f. 16 ♀.

Hab. Russia.

14. EUCERA CRINITA.

Eucera crinita, *Bär, Bull. Mosc.* xxiii. 536. 14. t. 13. f. 14.

Hab. Russia.

15. EUCERA CINGULATA.

Eucera cingulata, *Bär, Bull. Mosc.* xxiii. 534. 10. t. 13. f. 10.

Hab. Russia.

16. EUCERA CONTINUA.

Eucera continua, *Bär, Bull. Mosc.* xxiii. 535. 12. t. 13. f. 12 ♀.

Hab. Russia.

17. EUCERA CANA.
Eucera cana, *Bär, Bull. Mosc.* xxiii. 535. 13. t. 13. f. 13.
Hab. Russia.

18. EUCERA DASYPODA.
Eucera Dasypoda, *Bär, Bull. Mosc.* xxiii. 533. 8. t. 13. f. 8 ♀.
Hab. Russia.

19. EUCERA FISCHERI.
Eucera Fischeri, *Bär, Bull. Mosc.* xxiii. 531. 3. t. 13. f. 3 ♂.
Hab. Russia.

20. EUCERA INTERRUPTA.
Eucera interrupta, *Bär, Bull. Mosc.* xxiii. 533. 7. t. 13. f. 7 ♀.
Hab. Russia.

21. EUCERA ROBUSTA.
Eucera robusta, *Bär, Bull. Mosc.* xxiii. 534. 9. t. 13. f. 9 ♂.
Hab. Russia.

22. EUCERA VITTIGERA.
Eucera vittigera, *Bär, Bull. Mosc.* xxiii. 536. 15. t. 13. f. 15 ♀.
Hab. Russia.

23. EUCERA COARCTATA.
Eucera coarctata, *Eversm. Bull. Mosc.* xxv. 119. 3.
Hab. Russia.

24. EUCERA CINERARIA.
Eucera cineraria, *Eversm. Bull. Mosc.* xxv. 120. 4.
Hab. Russia.

25. EUCERA DALMATICA. B.M.
Eucera Dalmatica, *St. Farg. Hym.* ii. 133. 22 ♂.
Hab. Dalmatia.

26. EUCERA GLAUCA.
Eucera glauca, *Fabr. Ent. Syst.* ii. 344. 4 ♂.
Hab. Bagdad.

27. EUCERA GRISEA. B.M.

Eucera grisea, *Fabr. Ent. Syst.* ii. 345. 6; *Syst. Piez.* p. 383. 7.
Spin. Ins. Lig. fasc. 1. 150. 3.
Eucera bicolor, *St. Farg. Hym.* ii. 127. 14.
Macrocera grisea, *Eversm. Bull. Mosc.* xxv. 123. 4?

Hab. Barbary; Algeria (Oran).

28. EUCERA ATRICORNIS.

Eucera atricornis, *Fabr. Ent. Syst.* ii. 344. 2; *Syst. Piez.* 382. 2.
Coqueb. Illus. Ins. dec. 2. p. 64. t. 15. f. 11.
Spin. Ins. Lig. fasc. 1. 150. 3.
St. Farg. Hym. ii. 128. 15.
Lucas, Explo. Sc. Algér. iii. 162. 43.

Hab. Barbary; Algeria (Oran).

29. EUCERA DIMIDIATA.

Eucera dimidiata, *Brullé, Expéd. Sc. Morée, Zool.* iii. 334. 741 ♂.

Hab. The Morea.

30. EUCERA SEMINUDA.

Eucera seminuda, *Brullé, Expéd. Sc. Morée, Zool.* iii. 335. 745. t. 48. f. 6.

Hab. The Morea.

31. EUCERA TRIVITTATA.

Eucera trivittata, *Brullé, Expéd. Sc. Morée, Zool.* iii. 335. 746 ♀.

Hab. The Morea.

32. EUCERA VULPES.

Eucera vulpes, *Brullé, Expéd. Sc. Morée, Zool.* iii. 336. 747 ♂.

Hab. The Morea.

33. EUCERA POLLINOSA. B.M.

Female. Length 6½ lines.—Black, the face has a pale fulvous pubescence, that on the labrum is of the same colour, the mandibles ferruginous towards the apex, the tips black; the thorax above clothed with fulvous pubescence; the legs rufo-piceous, their pubescence fulvous, that on the tarsi beneath ferruginous, the apical joints of the tarsi ferruginous; the tegulæ pale testaceous, the wings fulvo-hyaline, the nervures ferruginous, slightly clouded at their apical margins. The base of the abdomen has

a long pale fulvous pubescence, the five apical segments, except the middle of the first, entirely covered with a very short fulvous pubescence, resembling the pollen of flowers; the basal segment has also a little at its lateral angles, this pubescence becomes gradually brighter towards the apex; the apical segments beneath have a long fulvous fringe.

Hab. Albania.

34. EUCERA HISPANA.

Eucera Hispana, *St. Farg. Hym.* ii. 135. 25 ♀.

Hab. Spain.

35. EUCERA NIGRIPES.

Eucera nigripes, *Klug, Symb. Phys.* dec. v. t. 50. f. 8.

Hab. Syria.

36. EUCERA HELVOLA.

Eucera helvola, *Klug, Symb. Phys.* dec. v. t. 50. f. 7.

Hab. Syria.

37. EUCERA THORACICA.

Eucera thoracica, *Spin. Ann, Soc. Ent. Fr.* vii. 537. 77 ♂ (1838).

Hab. Egypt.

38. EUCERA AFFINIS.

Eucera affinis, *Spin. Ann. Soc. Ent. Fr.* vii. 538. 78 ♀.

Hab. Egypt.

39. EUCERA UNICINCTA.

Eucera unicincta, *St. Farg. Hym.* ii. 138. 29 ♂.
Lucas, Explo. Sc. Algér. iii. 163. 46. t. 4. f. 4.

Hab. Algeria (Oran).

40. EUCERA VIDUA.

Eucera vidua, *St. Farg. Hym.* ii. 121. 5.
Lucas, Explo. Sc. Algér. iii. 159.

Hab. Algeria (Oran).

41. EUCERA SUBVILLOSA.

Eucera subvillosa, *St. Farg. Hym.* ii. 125. 9 ♂.
Lucas, Explo. Sc. Algér. iii. 169. 39. t. 3. f. 7.

Hab. Algeria (Oran).

42. EUCERA PYRRHULA.

Eucera pyrrhula, *Erich. in Wagner, Reis. in der Regents Algier.* iii. 195. 55. t. 9.
Lucas, Explo. Sc. Algér. iii. 159.

Hab. Algeria.

43. EUCERA ORANIENSIS.

Eucera Oraniensis, *St. Farg. Hym.* ii. 128. 7 ♂.
Lucas, Explo. Sc. Algér. iii. 159. t. 3. f. 2 ♀. 2 *b*.
Eucera grisea, *Fabr. Ent. Syst.* ii. 345. 6?

Hab. Algeria (Oran).

44. EUCERA NOTATA.

Eucera notata, *St. Farg. Hym.* ii. 126. 11 ♂.
Lucas, Explo. Sc. Algér. iii. 161. 40. t. 3. f. 6.

Hab. Algeria (Oran).

45. EUCERA NIGRA.

Eucera nigra, *St. Farg. Hym.* ii. 126. 12 ♀.
Lucas, Explo. Sc. Algér. iii. 126. 41. t. 4. f. 1.

Hab. Algeria (Oran).

46. EUCERA FERRUGINEA.

Eucera ferruginea, *St. Farg. Hym.* ii. 140. 33 ♀.
Lucas, Explo. Sc. Algér. iii. 164. 47. t. 4. f. 5.

Hab. Algeria (Oran).

47. EUCERA BICINCTA.

Eucera bicincta, *St. Farg. Hym.* ii. 137. 28 ♂.
Lucas, Explo. Sc. Alger. iii. 163. 45. t. 4. f. 3.

Hab. Algeria (Oran).

48. EUCERA AFRICANA.

Eucera Africana, *St. Farg. Hym.* ii. 124. 8 ♂.
Lucas, Explo. Sc. Algér. iii. 160. t. 3. f. 3.

Hab. Algeria (Oran).

49. EUCERA ALGIRA.

Eucera Algira, *St. Farg. Hym.* ii. 134. 23 ♀.
Brullé, Hist. Nat. Il. Canar. ii. 85. 12.
Lucas, Explo. Sc. Algér. iii. 162. 44. t. 4. f. 2.

Hab. Algeria (Oran).

50. EUCERA RUFESCENS.

Eucera rufescens, *St. Farg. Hym.* ii. 130. 18 ♂.

Hab. Cayenne.

51. EUCERA ALTERNANS.

Eucera alternans, *St. Farg. Hym.* ii. 138. 30 ♂.

Hab. —— ?

52. EUCERA CINEREA.

Eucera cinerea, *St. Farg. Hym.* ii. 125. 11 ♂.

Hab. —— ?

53. EUCERA MARGINATA.

Eucera marginata, *St. Farg. Hym.* ii. 135. 26 ♂.

Hab. —— ?

54. EUCERA PULVINATA.

Eucera pulvinata, *St. Farg. Hym.* ii. 140. 32 ♀.

Hab. —— ?

55. EUCERA SQUAMOSA.

Eucera squamosa, *St. Farg. Hym.* ii. 134. 24 ♀.

Hab. —— ?

56. EUCERA VETULA.

Eucera vetula, *St. Farg. Hym.* ii. 127. 13 ♂.

Hab. —— ?

Genus 44. TETRALONIA.

Apis, pt., *Rossi, Faun. Etrus.* 923 (1790).
Eucera, pt., *Fabr. Ent. Syst.* ii. 343 (1793).
Macrocera, *Latr. Fam. Nat.* (nec *Meig. Illig. Mag.* 1803, *Dipt.*) (1825).
Tetralonia, *Spin. Ann. Soc. Ent. Fr.* vii. (1838).

The maxillary palpi 6-jointed, the labial palpi 4-jointed; the superior wings having one marginal, and three complete submarginal cells; the first recurrent nervure received at or very near the apex of the second submarginal cell, occasionally uniting with the second transverse cubital nervure, the second recurrent nervure received at the apex of the third submarginal cell. The antennæ of the males elongate.

1. TETRALONIA ATRICORNIS.

Eucera atricornis, *Panz. Faun. Germ.* 106. 20 ♂.
Tetralonia atricornis, *Spin. Ann. Soc. Ent. Fr.* vii. (1838), 539. 80.
Macrocera atricornis, *Eversm. Bull. Mosc.* xxv. 122. 1.

Hab. Europe; Egypt.

2. TETRALONIA ALTICINCTA. B.M.

Macrocera alticincta, *St. Farg. Hym.* ii. 101. 14.

Hab. France (Paris).

3. TETRALONIA ANTENNATA.

Eucera antennata, *Fabr. Ent. Syst.* ii. 345. 7; *Syst. Piez.* 384. 8 ♂.
Spin. Ins. Lig. fasc. 1. 149. 2.
Panz. Faun. Germ. 99. 18.
Macrocera antennata, *Eversm. Bull. Mosc.* xxv. 123. 6.

Hab. Europe.

4. TETRALONIA GRANDIS.

Macrocera grandis, *Fons. Ann. Soc. Ent. Fr.* iv. n.ser. (1846), 46. 6 (var. ruficollis, *St. Farg.*?).

Hab. France (Aix).

5. TETRALONIA LONGICORNIS. B.M.

Eucera longicornis, *Panz. Faun. Germ.* 64. 21?
Macrocera longicornis, *St. Farg. Hym.* ii. 90. 2.
Lucas, Explo. Sc. Algér. iii. 156. 29. t. 3. f. 1.

Hab. Dalmatia; Montpellier; Algeria.

6. TETRALONIA MALVÆ.

Apis Malvæ, *Rossi, Faun. Etrus.* ii. 923.
Eucera antennata, *Fabr. Ent. Syst.* ii. 345. 7 ♂.
Latr. Hist. Nat. Crust. Ins. xiv. 44.
Panz. Faun. Germ. 99. 18.
Eucera Malvæ, *Latr. Gen. Crust. Ins.* iv. 274.

Hab. France; Italy; Germany.

7. TETRALONIA POLLINOSA.

Macrocera pollinosa, *St. Farg. Hym.* ii. 92. 4.

Hab. France (St. Sever).

8. TETRALONIA SALICARIÆ.

Macrocera Salicariæ, *St. Farg. Hym.* ii. 102. 15.

Hab. France (Paris).

9. TETRALONIA DENTATA.

Macrocera dentata, *Klug, Germ. Faun. Europ.* 21. 25.
Eversm. Bull. Mosc. xxv. 122. 3.

Hab. Russia.

10. TETRALONIA NASALIS.

Macrocera nasalis, *Eversm. Bull. Mosc.* xxv. 123. 5 ♂.

Hab. Russia.

11. TETRALONIA MEDIOCRIS.

Macrocera mediocris, *Eversm. Bull. Mosc.* xxv. 122. 2 ♂.

Hab. Russia.

12. TETRALONIA GRAJA.

Macrocera graja, *H. Schäff. Nomen. Entom.* p. 165.
Eversm. Bull. Mosc. xxv. 124. 7.

Hab. Russia.

13. TETRALONIA ALBIDA.

Macrocera albida, *St. Farg. Hym.* ii. 98. 10 ♂.

Hab. Spain.

14. TETRALONIA RUFICORNIS. B.M.

Macrocera ruficornis, *St. Farg. Hym.* ii. 107. 20 ♂.
Eucera ruficornis, *Fabr. Syst. Piez.* 383. 5.
Lucas, Explo. Sc. Algér. iii. 165. 48. t. 4. f. 6.

Hab. Spain.

15. TETRALONIA RUFICOLLIS. B.M.

Macrocera ruficollis, *Brullé, Expéd. Sc. Morée,* iii. 333. 740 ♂. t. 48. f. 5.
St. Farg. Hym. ii. 89. 1 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 156. 28. t. 2. f. 9.
Macrocera alternans, *Brullé, Expéd. Sc. Morée,* iii. 332. 739 ♀. t. 48. f. 4?
St. Farg. Hym. ii. 108. 22.
Lucas, Explo. Sc. Algér. iii. 157. 31.

Macrocera rufa, *St. Farg. Hym.* ii. 91. 3 ♂.
Lucas, Explo. Sc. Algér. 157. 30.
Tetralonia atricornis, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 539. 80.
Eucera ruficollis, *Klug, Symb. Phys.* dec. v. tab. 50. f. 9, 10.
Hab. Greece; Spain; Algeria (Oran).

16. TETRALONIA STRIGATA.
Macrocera strigata, *St. Farg. Hym.* ii. 104. 16 ♂.
Hab. Spain.

17. TETRALONIA SUBUNDULATA.
Macrocera subundulata, *St. Farg. Hym.* ii. 106. 19 ♀.
Hab. Spain.

18. TETRALONIA TARSATA.
Tetralonia tarsata, *Spin. Ann. Soc. Ent. Fr.* vii. 541 ♂.
Hab. Sicily.

19. TETRALONIA GROHMANNI.
Tetralonia Grohmanni, *Spin. Ann. Soc. Ent. Fr.* vii. 540 ♂.
Hab. Sicily.

20. TETRALONIA OLIVIERI.
Macrocera Olivieri, *St. Farg. Hym.* ii. 111. 25 ♂.
Hab. Bagdad.

21. TETRALONIA ATRATA.
Macrocera atrata, *Klug, Symb. Phys.* dec. v. t. 50. f. 13.
Hab. Egypt (Cairo).

22. TETRALONIA PUMILA.
Macrocera pumila, *Klug, Symb. Phys.* dec. v. t. 50. f. 15.
Hab. Egypt (Cairo).

23. TETRALONIA CAPENSIS.
Macrocera Capensis, *St. Farg. Hym.* ii. 95. 7 ♂.
Hab. Africa. (Coll. F. Smith.)

24. TETRALONIA BASIZONA.
Tetralonia basizona, *Spin. Ann. Soc. Ent. Fr.* vii. (1838) 538. 79.
Hab. Egypt.

25. TETRALONIA CUNICULINA.

Macrocera cuniculina, *Klug, Symb. Phys.* dec. v. t. 50. f. 14.
Hab. Egypt (Cairo).

26. TETRALONIA CRINITA.

Macrocera crinita, *Klug, Symb. Phys.* dec. v. t. 50. f. 12.
Hab. Egypt (Cairo). (Coll. W. W. Saunders, Esq.)

27. TETRALONIA LANUGINOSA.

Macrocera lanuginosa, *Klug, Symb. Phys.* dec. v. t. 50. f. 11.
Hab. Egypt.

28. TETRALONIA TESTACEA. B.M.

Male. Length 4½ lines.—The face below the antennæ pale rufo-testaceous, the labrum, mandibles and inferior margin of the cheeks ferruginous, the antennæ ferruginous, fuscous above towards their apex, the vertex black; the thorax dark rufo-testaceous, on the disk are two obscure parallel longitudinal lines of a lighter colour, the disk has a thin short griseous pubescence; on the metathorax and beneath it is of the same colour, but longer; the tegulæ and legs pale rufo-testaceous; the wings fulvo-hyaline, the nervures ferruginous. Abdomen fusco-ferruginous, naked or merely having a few scattered griseous hairs, beneath brighter ferruginous.

Hab. Africa.

29. TETRALONIA CHINENSIS. B.M.

Male. Length 5½ lines.—Black, the clypeus yellow, the labrum white, fringed with bright pale yellow hairs; the sides of the face below the antennæ covered with long griseous pubescence; on the vertex and disk of the thorax a clothing of pale fulvous pubescence, on the cheeks and thorax beneath it is white; the antennæ as long as the body, the joints subarcuate; the tegulæ pale testaceous, the wings subhyaline, the nervures pale ferruginous; the four apical joints of the tarsi pale ferruginous, the pubescence of the legs pale ochraceous. Abdomen nigro-æneous, the apical margins of the segments broadly rufo-testaceous; the basal segments have a thin pale fulvous pubescence, beyond which it is fuscous.

Hab. North China (Shanghai).

30. TETRALONIA DUVAUCELII.

Macrocera Duvaucelii, *St. Farg. Hym.* ii. 98. 11 ♂.

Hab. India (Bengal).

31. TETRALONIA ELEGANS.

Male. Length 5 lines.—Black, the clypeus, labrum and mandibles yellow, the latter ferruginous at their apex; the flagellum, tegulæ, nervures of the wings and the apical joints of the tarsi bright ferruginous; the face and legs have a silvery white pubescence; that on the disk of the thorax pale fulvous; the wings hyaline, very faintly clouded at their apical margins; the base of the abdomen has a little pale fulvous pubescence, the three following segments have on their basal margins a fascia of short white pubescence, the third fascia broad, nearly covering the segment, the fifth segment entirely covered; the apical segment covered on each side with fuscous pubescence; beneath, the margins of the segments rufo-testaceous and ciliated with white pubescence.

Hab. India. (Coll. W. W. Saunders, Esq.)

32. TETRALONIA FLORALIA.

Male. Length 5 lines.—Black, the face thinly covered with a long griseous pubescence, the labrum having a long beard of pale yellow hairs; the clypeus yellow, the antennæ longer than the body, the joints subarcuate. Thorax, the disk shining, strongly punctured, thinly clothed with pale yellow pubescence, the wings hyaline, the nervures and tegulæ rufo-testaceous; the legs have a dense pale glittering silvery pubescence, the apical joints of the tarsi bright ferruginous. Abdomen ovate, convex, the base coarsely punctured, the apical margins of segments testaceous and having a fringe of pale pubescence; the base having some long pale hairs, and the entire abdomen a short scale-like pubescence.

Hab. North China (Shanghai).

33. TETRALONIA FASCIATA. B.M.

Male. Length 4½ lines.—Black, the clypeus, labrum and tips of the mandibles yellowish-white; the flagellum fulvous beneath; the pubescence on the face below the antennæ white; above, as well as on the disk of the thorax, it is pale fulvous, and on the cheeks and thorax beneath griseous; the wings fulvo-hyaline, the nervures ferruginous, the tegulæ testaceous; the apical joints of the tarsi ferruginous, the legs have a bright yellowish-white pu-

bescence, on the basal joint of the posterior tarsi within it is fulvous. Abdomen of a dark fuscous, the apical margins of the segments narrowly rufo-testaceous; the base has a little pale fulvous pubescence, the second and third segments have a fascia of white short scale-like pubescence, the first much attenuated in the middle, the other segments are entirely covered with a similar pubescence.

Hab. North China (Foo-cho-foo).

34. TETRALONIA TRICINCTA.

Macrocera tricincta, *St. Farg. Hym.* ii. 101. 14.

Hab. Algeria.

35. TETRALONIA SENEX.

Male. Length 4 lines.—Black, entirely covered with snow-white pubescence, the sixth and seventh segments of the abdomen black, beneath black; the legs black beneath, the posterior tarsi entirely so; the flagellum except the two apical joints nigro-piceous beneath; the clypeus and mandibles white, the apex of the latter ferruginous, the claws dark ferruginous; the wings hyaline, the nervures ferruginous, pale towards the base of the wings, the tegulæ pale rufo-testaceous.

Hab. Algeria? (Coll. J. S. Baly, Esq.)

36. TETRALONIA BREVICORNIS. B.M.

Male. Length 5½ lines.—Black, the pubescence on the head and thorax pale ochraceous, that on the cheeks, sides of the metathorax and on the thorax beneath griseous; the antennæ not longer than the head and thorax, submoniliform, fulvous beneath; the mandibles ferruginous, their tips black; the wings subhyaline, faintly clouded at their apical margins, the tegulæ ferruginous; the tibiæ and tarsi ferruginous. Abdomen fusco-testaceous, sometimes rufo-testaceous, the apical margins being pale; the whole abdomen has a thinly scattered griseous pubescence, that on the margins slightly fulvous; beneath, the margins of the segments are of a shining reddish yellow, having a transparent lustre.

Hab. Australia (Moreton Bay).

37. TETRALONIA TERMINATA.

Female. Length 5½ lines.—Black, the face clothed with cinereous pubescence, the cheeks densely covered with white pubescence, the mandibles yellow towards their apex, their tips

black, the flagellum fulvous beneath; the thorax covered anteriorly with sooty-black pubescence, posteriorly with fulvous, the fulvous pubescence forming an epaulet over the tegulæ; the wings fusco-hyaline; legs dark rufo-testaceous, their pubescence black. Abdomen ovate, shining, and having a little cinereous pubescence at the base, the apical margin of the third segment and the whole of the fourth and fifth segments covered with a silvery pubescence, sometimes it has a golden lustre, the apex fuscous and having on each side some long white hairs; the abdomen obscure rufo-testaceous beneath, the margins of the segments palest, the two apical ones fringed with pale pubescence.

Hab. South America. (Coll. F. Smith.)

38. TETRALONIA BIFASCIATA.

Female. Length 5¼ lines.—Black, the pubescence on the head, thorax and legs fuscous, on each side of the clypeus is a little that is short and white, on the cheeks it is also white; on the sides of the metathorax it is griseous; the scopa on the posterior tibiæ in certain lights has a fulvous tint; the flagellum fulvous beneath, the labrum, apex of the mandibles and apical joints of the tarsi ferruginous; the legs fusco-ferruginous; the wings fulvo-hyaline, the nervures ferruginous, their tegulæ rufo-testaceous. The abdomen has an æneous tinge, the margin of the basal segment being narrowly rufo-testaceous, the second and third segments have their margins broadly pale yellow-testaceous, the following segments faintly testaceous; the pale fasciæ have thin golden pubescence, the base of the abdomen has a little white pubescence; beneath, rufo-testaceous, the margins of the segments having a thin fringe of curled white pubescence.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

39. TETRALONIA ANALIS. B.M.

Macrocera analis, *St. Farg. Hym.* ii. 104. 16 ♂.

Hab. Brazil.

40. TETRALONIA FESTIVA.

Female. Length 5 lines.—Black, the pubescence on the sides of the face and labrum short, dense, and of a yellowish-white, it is of the same hue but thinner on the clypeus, which is coarsely punctured, apex of the mandibles yellow; the flagellum, except the three basal joints, fulvous beneath. Thorax, the disk has an æneous tinge, the sides densely clothed with a short pale fulvous pubescence, on each side in front of the tegulæ is a tuft of black pubescence, the scutellum is clothed with pubescence of the same

colour, and surrounded with a thick fringe of pale fulvous; the tegulæ pale fulvo-testaceous, the wings fulvo-hyaline, the nervures ferruginous; the femora dark rufo-testaceous, the tibiæ and tarsi ferruginous, and clothed with fulvous pubescence. Abdomen nigro-æneous, the margins of the segments pale testaceous, the base has a thin covering of pale fulvous pubescence, the second and third segments have a broad fascia of short, dense, fulvous pubescence, the fourth segment entirely covered and the fifth laterally clothed with a similar pubescence; the fifth in the middle has a fuscous pubescence, as well as the sides of the sixth segment.

Hab. Brazil (Para). (Coll. F. Smith.)

41. TETRALONIA FULVIPES.

Male. Length 5 lines.—Black, the pubescence on the head, thorax and legs fulvous, the clypeus, labrum, and the base and apex of the mandibles yellow; the middle of the latter ferruginous; the flagellum fulvous beneath; the tegulæ rufo-testaceous, the wings fulvo-hyaline, the nervures and base of the wings ferruginous, the legs ferruginous, the coxæ and base of the femora slightly fuscous; the abdomen has an æneous tinge, the apical margins of the segments broadly pale testaceous; the base of the abdomen has a little pale fulvous pubescence, the basal margin of the second segment has a band of pale pubescence, the fourth and fifth segments have on their apical margins laterally a fringe of pale pubescence, all the segments have on their middle some erect fuscous hairs.

Hab. Brazil. (Coll. F. Smith.)

42. TETRALONIA NIGRO-ÆNEA.

Female. Length 5 lines.—Head and thorax black, the face thinly clothed with a short griseous pubescence, on the cheeks it is of the same colour, but longer; the flagellum, except the three basal joints, fulvous beneath; the labrum testaceous, the mandibles ferruginous at their apex; the pubescence on the thorax and the anterior and intermediate legs black; on the metathorax and base of the abdomen it is fulvo-ochraceous; wings subhyaline, nervures and tegulæ ferruginous; the tarsi ferruginous beneath, as well as the claw-joint, the claws black; the posterior tibiæ have a scopa of pale fulvous pubescence, that on the tarsi beneath bright fulvous. Abdomen nigro-æneous, the second segment has a band at its base and another a little beyond the middle, a third on the third segment towards the base; the fourth a band on its apical margin and an oblique

stripe on each side from the middle of its base to its lateral margin, where it unites with the marginal band, all of pale yellowish-white pubescence; beneath, the margins of the segments rufo-testaceous, the apical segments fringed with fulvous pubescence.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

43. TETRALONIA THORACICA.

Female. Length 5 lines.—Black, the pubescence on the vertex and thorax above fulvous, the labrum has a fringe of fulvous hairs, and the face is thinly clothed with light fulvous; the pubescence on the legs sooty-black; the wings fulvo-hyaline and having a fuscous cloud at their apical margins, which also covers the upper portion of the marginal cell, the nervures and tegulæ ferruginous, the latter palest; the abdomen has a little fulvous pubescence at its base, the third and fourth segments have a very narrow white marginal fascia, the first subinterrupted; the apical segments have a little fuscous pubescence; beneath rufo-testaceous, the third and fourth segments having a pale marginal fringe.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

T. unifasciata is very probably the male of this species; they are from the same locality.

44. TETRALONIA UNIFASCIATA.

Male. Length 4 lines.—Black, the pubescence on the head, thorax and base of the abdomen fulvo-ochraceous, palest on the face; on the cheeks and thorax beneath it is griseous; the femora and tibiæ have also a griseous pubescence, that on the tarsi is very pale fulvous; the clypeus, labrum and mandibles yellow; the flagellum, except the two basal joints, fulvous beneath; the wings subhyaline, faintly clouded at their apical margins, the nervures ferruginous, the tegulæ pale ferruginous, as well as the apical joints of the tarsi. Abdomen, a fascia of silvery-white pubescence on the basal margin of the second segment; the following segments have on their apical margins laterally a little short white pubescence, frequently obliterated; the apex slightly fulvous, the apical segment having on each side a minute tooth.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

45. TETRALONIA SEXCINCTA.

Macrocera sexcincta, *St. Farg. Hym.* ii. 99. 12 ♀.

Hab. Brazil.

46. TETRALONIA DISPAR.

Female. Length 5½ lines.—Black, the face covered with cinereous pubescence, intermixed with some long black hairs; clypeus convex, produced, the labrum covered with yellowish-white hairs, the flagellum fulvous beneath; the cheeks have a dense white pubescence. Thorax anteriorly clothed with sooty-black pubescence, posteriorly with fulvous; wings subhyaline, the legs fusco-ferruginous, their pubescence black, the apical joints of the tarsi ferruginous. Abdomen black and shining, at the base a little fulvous pubescence, and the sides towards the apex fringed with black pubescence; the margins of the basal segments beneath rufo-testaceous, the apical segments fringed with sooty-black hairs.

Hab. Peru.

47. TETRALONIA MARGINATA.

Macrocera marginata, *St. Farg. Hym.* ii. 109. 23.

Hab. Cayenne.

48. TETRALONIA CAJENNENSIS.

Macrocera Cajennensis, *St. Farg. Hym.* ii. 94. 6 ♂.

Hab. Cayenne; West Indies. (Coll. F. Smith.)

49. TETRALONIA ATRIFRONS. B.M.

Male. Length 5 lines.—Black, the pubescence on the face black, that on the margin of the vertex cinereous; the clypeus yellow at its anterior margin; the mandibles dark ferruginous, and having a yellow spot a little before their apex; the antennæ entirely black. The thorax above, the metathorax, two first segments of the abdomen, and a patch beneath the wings ochraceous; otherwise entirely black, excepting a few pale hairs on the anterior tibiæ behind, on the intermediate pair as well as on their tarsi, and on the posterior tibiæ and tarsi in front; the wings subhyaline, their nervures dark brown; the claw-joint of the tarsi slightly ferruginous, the claws black.

Hab. Chili.

50. TETRALONIA MELANURA.

Tetralonia melanura, *Spin. Faun. Chili.* vi. 175. 2.

Length 5 lines.—Black, pubescent; thorax above and the first and second segments of the abdomen clothed with white pubescence; antennæ of the male longer than the body.

Hab. ——?

51. TETRALONIA FLAVITARSIS.

Tetralonia flavitarsis, *Spin. Faun. Chili.* vi. 174. 1.

Length 4½ lines.—Black, the pubescence fulvous; the tarsi and tegulæ subrufous; the abdomen having three fasciæ of white pubescence; the antennæ of the male longer than the body.

Hab. Chili.

52. TETRALONIA MELÆNA.

Tetralonia melæna, *Spin. Faun. Chili.* vi. 176. 4.

Length 5 lines.—The pubescence entirely black; wings hyaline, nervures black.

Hab. Chili.

53. TETRALONIA GAYI.

Tetralonia Gayi, *Spin. Faun. Chili.* vi. 176. 3.

Length 5 lines.—The pubescence white; the labrum, legs and abdomen beneath black; the antennæ of the male shorter than the body.

Hab. Chili.

54. TETRALONIA LANIERII.

Macrocera Lanierii, *Guér. Icon. Règ. Anim. Ins.* 455. t. 74. f. 7.

Hab. Cuba.

55. TETRALONIA FULVIVENTRIS. B.M.

Female. Length 7 lines.—Head and thorax black, the face has a thin pale fulvous pubescence, that on the disk of the thorax is similar; the labrum ciliated with bright fulvous hairs; the tegulæ rufo-piceous, wings fulvo-hyaline, the nervures ferruginous, the apical margins of the wings faintly clouded; the legs nigro-piceous, the tarsi ferruginous; the legs clothed with bright fulvous pubescence. Abdomen, the base of the segments black, the apical margins of the segments broadly rufo-testaceous, except the basal half of the first segment, the whole densely clothed with a short bright fulvous pubescence; beneath the margins of the segments rufo-piceous, ciliated with ferruginous hairs.

Hab. Mexico?

56. TETRALONIA ATRIFRONS.

Female. Length 7 lines.—Black, the pubescence on the head entirely black. The thorax above, and the basal segment of the abdomen, clothed with ochraceous pubescence, on the other

parts it is entirely black; the wings fusco-hyaline, their nervures fusco-ferruginous; the anterior tarsi brownish beneath, the claws ferruginous.

Hab. North Carolina. (Coll. W. W. Saunders, Esq.)

57. TETRALONIA BICOLOR.

Macrocera bicolor, *St. Farg. Hym.* ii. 113. 29 ♀.

Hab. ——?

58. TETRALONIA BARBATA.

Macrocera barbata, *St. Farg. Hym.* ii. 112. 28 ♂.

Hab. ——?

59. TETRALONIA ATRA.

Macrocera atra, *St. Farg. Hym.* ii. 112. 26 ♂.

Hab. ——?

60. TETRALONIA NIGRICORNIS.

Macrocera nigricornis, *St. Farg. Hym.* ii. 107. 21 ♂.

Hab. ——?

61. TETRALONIA CINGULATA.

Macrocera cingulata, *St. Farg. Hym.* ii. 105. 18 ♂.

Hab. ——?

Genus 45. MELISSODES.

Melissodes, *Latr. Règ. Anim.* v. 354 (1829).
Macrocera, *Say, Bost. Journ.* i. 403 (1837).

The maxillary palpi 4-jointed, the labial palpi 4-jointed. The ocelli placed in a line on the vertex, the antennæ elongate in the males. The anterior wings having one marginal and three submarginal cells.

1. MELISSODES PRUINOSA. B.M.

Macrocera pruinosa, *Say, Bost. Journ.* i. 405. 3.

Hab. United States (Mount Pleasant, Ohio).

2. MELISSODES RUSTICA.

Macrocera rustica, *Say, Bost. Journ.* i. 406. 4.

Hab. North America (Indiana).

This may possibly be the species described as *M. denticulata*,

but as the teeth which arm the apex of the abdomen are not mentioned by Say, it becomes doubtful.

3. MELISSODES OBLIQUA. B.M.

Macrocera obliqua, *Say, Bost. Journ.* i. 403. 1.

Hab. North America (Indiana).

4. MELISSODES NIGRA.

Macrocera nigra, *St. Farg. Hym.* ii. 112. 27.

Hab. North America. (Coll. F. Smith.)

5. MELISSODES DESPONSA. B.M.

Female. Length 6 lines.—Black, the pubescence on the head and thorax ochraceous; the flagellum, except the three basal joints, testaceous beneath, the clypeus strongly punctured and having a little dark fuscous pubescence; the apex of the mandibles pale testaceous yellow; the wings subhyaline, the nervures ferruginous; the pubescence on the body and legs beneath entirely black; the base of the abdomen has a little ochraceous pubescence, beyond which it is black, as it is also on the anterior and intermediate legs above, on the posterior tibiæ, and at the base of the first joint of the posterior tarsi above, pale fulvous, the claw-joint of all the tarsi dark ferruginous; the margins of the segments of the abdomen beneath rufo-testaceous.

Hab. North America (Ohio).

Var. The wings fuscous, and the fourth segment of the abdomen having on its apical margin laterally, a short white fringe. This is probably the female of "*Americana*," both sexes having been received from the same locality.

6. MELISSODES ATRIVENTRIS. B.M.

Male. Length 6 lines.—Black, the clypeus and labrum yellow, the pubescence on the head and thorax ochraceous, that on the face and metathorax palest; the legs have a similar pubescence, the apical joints of the tarsi rufo-testaceous; the wings subhyaline, the nervures testaceous, the tegulæ pale testaceous; the base of the abdomen clothed with pale ochraceous pubescence, beyond which it is entirely black, beneath it is of the same colour; the entire apical margins of the segments rufo-testaceous, the abdomen having a slight æneous tinge.

Hab. North America?

7. MELISSODES DENTICULATA. B.M.

Male. Length 4 lines.—Black, the clypeus yellow, and having its base narrowly black; the mandibles yellow at their tips; the flagellum fulvous beneath, except the two basal joints; the head and thorax have a thin hoary pubescence, as well as the legs, the apical joints of the tarsi ferruginous; the wings hyaline, their nervures fuscous. Abdomen ovate, and having a thin hoary pubescence at the base and sides; on the second, third, fourth and fifth segments are indistinct bands of the same coloured pubescence, usually more or less interrupted on the second and third; at the lateral margins of the fifth segment, at its base, a short angular acute tooth and a smaller one at the base of the sixth segment; the lateral margins of all the segments slightly testaceous.

Hab. United States.

8. MELISSODES SENILIS.

Female. Length 4½ lines.—Black, the pubescence of the head and thorax cinereous; the legs nigro-piceous, the apical joints of the tarsi ferruginous; the anterior and intermediate tarsi have fuscous pubescence, on the posterior tibiæ and tarsi it is pale fulvous, on the basal joint of the posterior tarsi within it is fuscous; the wings subhyaline, the nervures ferruginous. Abdomen very smooth and shining, at the base a little cinereous pubescence, the second segment has on its basal margin laterally, a line of white pubescence attenuated within; a similar line in the middle; the third and fourth segments have a band on their basal margin, attenuated in the middle; the fifth and sixth are clothed with fuscous pubescence; beneath, the apical margins are ciliated in the middle with fuscous pubescence, and on the sides with white.

Hab. North America (Mount Pleasant, Ohio).

This is very probably the female of *M. denticulata*; both are from the same locality and have a close specific resemblance.

9. MELISSODES NIGRIPES. B.M.

Female. Length 7 lines.—Black, the head and thorax covered with ochraceous pubescence, that on the latter palest; the legs and their pubescence black; wings subhyaline, their nervures ferruginous; the tegulæ pale testaceous; the abdomen and its pubescence entirely black; sometimes a little ochraceous pubescence at the base and the apical margins rufo-testaceous.

Male. Length 5½ lines.—Very closely resembling the female; the clypeus yellow; the flagellum pale fulvous or yellow beneath,

except the two basal segments; the claws ferruginous: otherwise as in the other sex.

Hab. United States.

10. MELISSODES PENNSYLVANICA.

Macrocera Pennsylvanica, *St. Farg. Hym.* ii. 97. 9 ♂.

Hab. Pennsylvania.

11. MELISSODES PHILADELPHICA.

Macrocera Philadelphica, *St. Farg. Hym.* ii. 110. 24 ♂.

Hab. Pennsylvania.

12. MELISSODES AMERICANA.

Macrocera Americana, *St. Farg. Hym.* ii. 92. 4 ♂.

Hab. Carolina. (Coll. F. Smith.)

13. MELISSODES DENTIVENTRIS. B.M.

Male. Length 5½ lines.—Black, the clypeus, and mandibles at their apex yellow; the flagellum, except the two basal joints, fulvous beneath, and fuscous above; the pubescence on the head, thorax and legs fulvous; the wings subhyaline, their nervures ferruginous; the legs dark rufo-testaceous, the apical joints of the tarsi ferruginous; the base of the abdomen clothed with fulvous pubescence, the second segment has a narrow band of short pubescence of the same colour, and on each side about the middle a short line of the same; the remaining segments have a scattered black pubescence with which their sides are fringed; beneath, the pubescence is black; at the extreme lateral margins of the fifth and sixth segments is a minute tooth or spine, the apical segment above rufo-testaceous.

Hab. Georgia.

14. MELISSODES MANIPULARIS. B.M.

Male. Length 4½ lines.—Black, the clypeus and tips of the mandibles yellow, the flagellum, except the two basal joints, fulvous beneath, and fuscous above; the face clothed with white pubescence, on the vertex it is pale fulvous, as it is also on the disk of the thorax; beneath, and on the sides it is paler, as well as that which clothes the metathorax; the legs rufo-testaceous, the apical joints of the tarsi pale testaceous, the claws ferruginous; the wings hyaline, the nervures and tegulæ ferruginous. Abdomen, the base thinly clothed with pale pubescence; the second segment has a band of cinereous pubescence at its basal

margin, and a second a little before its apex; the third and fourth segments have a band in the middle, which on each side is slightly oblique; the fifth has a band at its base and on each side a short acute tooth bent inwards, the seventh segment has also a small tooth on each side at its base.

Hab. Georgia.

15. MELISSODES TERMINATA. B.M.

Female. Length 5½ lines.—Black, the labrum and a spot at the tips of the mandibles yellow; the flagellum, except the two basal and two or three apical joints, fulvous; the pubescence on the head, thorax and base of the abdomen cinereous, the wings subhyaline, their apex faintly clouded; the legs dark rufo-testaceous, the anterior femora have a long fringe of white pubescence, the apical joints of the tarsi pale ferruginous; the pubescence on the anterior and intermediate legs cinereous, that on the posterior pair dense, short, and black. Abdomen covered with fine shallow punctures, the apical margins of the segments slightly rufo-testaceous; the apex adorned with short golden pubescence, covering the two apical and the margin of the fourth segment. In old or worn specimens the golden pubescence on the abdomen becomes silvery or white.

Hab. Venezuela.

16. MELISSODES HÆMORRHOIDALIS.

Female. Length 5½ lines.—Black, the head shining, rather strongly punctured, the clypeus having a central longitudinal depression, and the face a thinly scattered sooty-black pubescence; the labrum densely covered with pale fulvous pubescence; the flagellum, except the two basal joints, fulvous beneath; the thorax shining on the disk, the punctures scattered, thinly clothed with sooty-black pubescence, most dense on the sides and beneath, the pubescence on the anterior and intermediate legs black, that on the posterior tibiæ and tarsi pale fulvous, the femora beneath fusco-ferruginous; the wings fulvo-hyaline, the nervures ferruginous, the tegulæ slightly rufo-testaceous. Abdomen, fusco-ferruginous at the base, the apical margin of the second segment having a yellowish tinge particularly towards the sides, the rest of the segments of a reddish-yellow, the third and fourth segments at their basal margins laterally slightly fuscous, the four apical segments covered with pale fulvous pubescence; the abdomen entirely of a reddish-yellow beneath, the segments fringed with fulvous pubescence.

Hab. South America. (Coll. F. Smith.)

17. Melissodes Æthiops.

Male. Length 5½ lines.—Black, the pubescence entirely black, except a little on the cheeks, sides of the face, and a fringe on the segments of the abdomen beneath, which is of a dirty white; the pubescence dense on the thorax, legs, and base of the abdomen; the wings subhyaline, faintly clouded at their apex, the nervures black, the claws, tips of the mandibles, and the anterior margin of the clypeus narrowly, ferruginous; the labrum yellow; the apex of the abdomen has a little fulvous pubescence. The pubescence of this insect is beautifully plumose or feathered.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

18. Melissodes fulvipes. B.M.

Male. Length 5 lines.—Black, the labrum, clypeus and base of the mandibles yellow, the apical half of the latter ferruginous; the flagellum fulvous beneath, except the two basal segments; the pubescence on the head, thorax and legs fulvous, being pale at the sides of the metathorax; the legs fulvous; the tegulæ fulvo-testaceous, the wings fulvo-hyaline, the nervures and tegulæ rufo-testaceous. Abdomen fusco-ferruginous, the apical margins of the segments rufo-testaceous; the base clothed with pale fulvous pubescence, the second segment has a band of short scaly pubescence at its basal margin, which is much narrowed in the middle, the third segment has a band at its base, and the following at their apical margins; the abdomen rufo-testaceous beneath.

Hab. Cayenne.

19. Melissodes rufo-dentata.

Male. Length 4½ lines.—Black, the clypeus and base of the mandibles yellow; the labrum cream-coloured and the flagellum fulvous beneath; the pubescence on the vertex and disk of the thorax, fulvo-ochraceous; that on the sides of the metathorax is paler; on the thorax beneath and on the cheeks it is cinereous; the wings fulvo-hyaline, the nervures and tegulæ pale ferruginous, all the tibiæ and tarsi of the same colour; the claws black. Abdomen fusco-ferruginous, the apical margins of the segments palest, the whole having a slight metallic or æneous tint; the second segment has a band of short pale ochraceous pubescence at its basal margin, and another a little beyond the middle; the three following segments have a single band towards their base; the apical segment is ferruginous in the middle, and has a small tooth of the same colour on each side; beneath, the apical margins of the segments are broadly rufo-testaceous.

Hab. St. Vincent's. (Coll. F. Smith.)

20. MELISSODES FONSCOLOMBEI.

Melissodes Fonscolombei, *Romand, Mag. Zool.* (1841) t. 70. f. 1 *a*, 1 *b*, ♂ & ♀.

Hab. Chili.

Genus 46. XENOGLOSSA.

Xenoglossa, *F. Smith's MSS*

Head transverse, stemmata very large, approximating, placed in a curve on the vertex. The mentum of about equal length with the two basal joints of the labial palpi, the latter 4-jointed, the two apical joints minute, placed at the apex of the second joint; the paraglossæ setiform, pubescent, nearly as long as the labium; the maxillary palpi 5-jointed; the basal joint incrassate, of the same length as the second joint, the third joint of the same length as the second, the fourth joint shorter than the third, the fifth very minute. Antennæ of about equal length in the two sexes, the flagellum subclavate. The superior wings having one marginal and two submarginal cells; the marginal as long as the three submarginal ones united; the second submarginal cell oblique-quadrate, the third narrowed towards the marginal; the posterior tibiæ slightly dilated and having a long loose scopa; the claws bifid; the intermediate legs of the males simple.

1. XENOGLOSSA FULVA. B.M.

Female. Length 8 lines.—Entirely bright fulvous, and clothed with fulvous pubescence, the flagellum fuscous; the wings fuscous, the nervures black, the tips of the claws black, the pubescence on the tarsi beneath ferruginous; the pubescence on the abdomen short and velvety, that on the basal segment is long, as well as that on the thorax.

Male.—Closely resembling the female, but having the clypeus and labrum yellow, the base of the mandibles is also yellow. The apical segment of the abdomen subquadrate, having on each side an elevated carina, and a central abbreviated one reaching the apex; above subrugose, beneath smooth and shining.

Hab. Mexico (Puebla).

Genus 47. OXÆA.

Oxæa, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), p. 262.

1. OXÆA FLAVESCENS. B.M.

Oxæa flavescens, *Klug, Berlin Mag.* p. 262. t. 7. f. 1 (1807) ♂.
Latr. Gen. Crust. Ins. iv. p. 172.
Blanch. Hist. Nat. Ins. iii. 411.

Female. Length 8 lines.—Head and thorax black, smooth and shining; the face has a pale yellow pubescence, that on the vertex and on the disk of the thorax fulvo-ochraceous; the wings subhyaline, their nervures testaceous; the legs pale fulvo-testaceous, and clothed with short fulvo-ochraceous pubescence, the posterior pair having a dense floccus on the posterior femora at their base, and the tibiæ having a dense scopa. Abdomen bright green, the base, sides and apex having a scattered yellow pubescence; beneath fulvo-testaceous, the margins of the segments thickly fringed with pale fulvous pubescence; the abdomen above is finely shagreened, the apical margins smooth and shining.

Hab. Brazil.

2. OXÆA FESTIVA.

Female. Length 9 lines.—Head and thorax black, smooth and shining; the clypeus has a few scattered punctures, on each side of which is a little short dense white pubescence; the mandibles elongate, arcuate, the labrum having a central carina; the mandibles rufo-piceous, fringed below with short ferruginous hairs. Thorax, the sides of the disk have a short velvety pubescence, the wings smoky-hyaline, the nervures and tegulæ black; the legs fulvo-testaceous, densely clothed with short fulvo-ochraceous pubescence, the posterior pair having a dense floccus at the base of the femora beneath, and the tibiæ a dense scopa of short pubescence. Abdomen brilliant green, very closely punctured, most strongly so towards the base, the apical margins of the segments smooth and shining, and having a brilliant golden effulgence; the fifth and sixth segments black, clothed with black pubescence; beneath rufo-testaceous, the margins of the apical segments fringed with ferruginous hairs.

Hab. Para (W. W. Bates). (Coll. F. Smith.)

Genus 48. MELITTURGA.

Eucera, pt., *Latr. Gen. Crust. Ins.* i. t. 14. f. 14.
Melitturga, *Latr. Gen. Crust. Ins.* iv. 176.

1. MELITTURGA CLAVICORNIS. B.M.

Eucera clavicornis, *Latr. Gen. Crust. Ins.* i. t. 14. f. 9.
Melitturga clavicornis, *Latr. Gen. Crust. Ins.* iv. 176.
Guér. Icon. Règ. Anim. Ins. 455. t. 74. f. 3.
St. Farg. Hym. ii. 172. 1 ♂ ♀.
Eversm. Bull. Mosc. xxv. 125. 1.

Hab. South of France.

2. MELITTURGA FERVENS.

Melitturga fervens, *St. Farg. Hym.* ii. 143. 3 ♂.
Lucas, Explo. Sc. Algér. iii. 166. 50.

Hab. Algeria.

3. MELITTURGA ORANIENSIS.

Melitturga Oraniensis, *St. Farg. Hym.* ii. 142. 2 ♂.
Lucas, Explo. Sc. Algér. iii. 165. 49. t. 4. f. 7.

Hab. Algeria.

Genus 49. SAROPODA.

Apis, pt., *Panz. Faun. Germ.* fasc. 56 (1800).
Heliophila, *Klug*, (olim) *Illig. Mag.* vi. 227 (1807).
Saropoda, *Latr. Gen. Crust. et Ins.* iv. 179 (1809).
Anthophora, pt., *St. Farg. Hym.* ii. 25 (1841).

1. SAROPODA BIMACULATA. B.M.

Apis bimaculata, *Panz. Faun. Germ.* 55. 17 ♀.
Kirby, Mon. Ap. Angl. ii. 286. 63.
Apis rotundata, *Panz. Faun. Germ.* 56. 9 ♂.
Kirby, Mon. Ap. Angl. ii. 291. 66.
Anthophora rotundata, *Blanch. Hist. Nat. des Ins.* iii. 406.
Anthophora bimaculata, *Spin. Ins. Lig.* fasc. 1. 127. 6.
St. Farg. Hym. ii. 36. 11.
Saropoda bimaculata, *Latr. Gen. Crust. et Ins.* iv. 177.
Curtis, Brit. Ent. viii. t. 361.
Smith, Zool. iii. 891. 1.
Heliophila bimaculata, *Klug, Illig. Mag.* vi. 227.

Hab. France; Germany; Britain.

2. SAROPODA FULVA.

Saropoda? fulva, *Eversm. Bull. Mosc.* xxv. 105. 1.

Hab. Russia.

3. SAROPODA TENELLA.

Saropoda tenella, *Klug, Symb. Phys.* dec. v. t. 50. f. 6 ♀.

Hab. Egypt.

4. SAROPODA BYSSINA.

Saropoda byssina, *Klug, Symb. Phys.* dec. v. t. 50. f. 4.

Hab. Egypt.

5. SAROPODA LUTULENTA.

Saropoda lutulenta, *Klug, Symb. Phys.* dec. v. t. 50. f. 5 ♀.

Hab. Egypt.

6. SAROPODA BOMBIFORMIS. B.M.

Female. Length 6 lines.—Black, the scape of the antennæ, clypeus and labrum of an orange-yellow, the mandibles yellow, their tips ferruginous; the flagellum rufo-piceous beneath. The entire insect clothed with a short rich fulvous pubescence, having a golden effulgence on the abdomen; the legs fulvo-ferruginous, the posterior femora more or less fuscous; wings fusco-hyaline, the nervures black, the tegulæ pale rufo-testaceous; the posterior tibiæ and the basal joint of the tarsi fringed with black pubescence, the claws black. Abdomen, the base of the second segment naked, forming a black band, the apical margins of the third and fourth segments and the entire apical ones fulvous.

Male: var. *α*. The legs entirely dark fuscous, and the posterior tarsi black.

Male.—This sex is coloured precisely the same as the female.

Hab. Australia (Richmond River).

7. SAROPODA LATIZONA.

Saropoda latizona, *Spin. Ann. Soc. Ent. Fr.* vii. 543. 82 (1838)

Hab. Egypt.

8. SAROPODA HUMILIS.

Saropoda humilis, *Spin. Ann. Soc. Ent. Fr.* vii. 544 (1838).

Hab. Africa.

9. SAROPODA NIGRILABRIS.

Saropoda nigrilabris, *Spin. Ann. Soc. Ent. Fr.* vii. 543 (1838).

Hab. Africa.

Genus 50. HABROPHORA.

(*F. Smith's MSS.*)

The labial palpi 4-jointed, the basal joint thrice the length of the second, the third and fourth minute, inserted at the side and near the apex of the second joint; the mentum about one-third shorter than the labium.

The maxillary palpi 6-jointed, the basal joint scarcely half the length of the second, the third a little longer than the first; the

three apical joints each in succession shorter than the preceding, the apical joint minute.

The superior wings with one marginal and three submarginal cells, the second and third submarginal cells narrowed towards the marginal, the first recurrent nervure *uniting with the second transverse cubital nervure.*

The flagellum of the antennæ of the male one-third longer than that of the female, but having the basal joint of the flagellum shorter than in the other sex.

This genus in many particulars agrees with that of *Anthophora*; the relative proportions of the mentum, labium and palpi are however different, but the neuration of the wings precludes the possibility of placing it in that genus.

1. HABROPHORA ZONATULA. B.M.

Female. Length 6½ lines.—Black; the face clothed with fulvous pubescence, pale at sides, sparing on the clypeus, and darkest on the vertex; the labrum densely covered with yellowish-white pubescence; the apex of the mandibles fulvo-testaceous. The thorax and basal segment of the abdomen densely clothed with fulvous pubescence above, beneath the former it is paler; the legs ferruginous, densely clothed above with fulvous pubescence. the scopa on the posterior tibiæ pale, on the tarsi beneath it is ferruginous; the wings subhyaline, the nervures ferruginous, the tegulæ pale rufo-testaceous. Abdomen; the apical margins of the segments have fasciæ of short yellowish-white pubescence; the fifth and sixth segments have a fringe of longer pubescence, which is white at the sides and fulvous in the middle.

Male.—Closely resembles the female, but having the clypeus, a triangular spot above it, the face on each side, the scape in front, the labrum and mandibles, yellow; the tips of the latter and the anterior margin of the clypeus ferruginous; at the base of the clypeus are two quadrate spots united at the base, but not touching the base of the clypeus. The pubescence of the thorax, abdomen and legs as in the other sex; the anterior coxæ armed with an elongate bent spine, which is slightly recurved and thickened at the apex, terminating in an acute point; all the femora incrassate; the basal joint of the anterior tarsi have a broadly dilated quadrate process occupying the apical half behind; this process has a row of short curved teeth along its apical margin; the second joint is armed beneath with an acute tooth; the basal joint of the posterior tarsi is produced at its apex beneath; this process is rounded at the extremity.

Hab. Albania.

2. HABROPHORA EZONATA. B.M.

Female. Length 7 lines.—Black, the face has a cinereous pubescence thinly scattered over the clypeus, but dense on each side of the face, that on the vertex is black, the labrum has a dense tuft of white pubescence, and the cheeks a dense beard of the same colour. The thorax and basal segment of the abdomen above, densely clothed with fulvo-ochraceous pubescence; the anterior femora have a long thick fringe which is formed by a mixture of pale and dark fuscous pubescence, the intermediate and posterior femora are fringed with fuscous pubescence, and above the legs have a short pubescence of the same colour, except the scopa on the posterior tibiæ, which is glittering yellowish-white. Abdomen; the second and third segments have a very short black pubescence, on the fourth it is silvery-white, very short and having some long white hairs intermixed, its apical margin has a dense white fringe; the sides of the following segment are similarly adorned, in the middle it is fuscous, as it is also on the apical segment.

Male.—Closely resembles the female, but the clypeus and a transverse line above, the face on each side, the scape in front and the basal half of the mandibles yellow; the apical half of the latter ferruginous; the anterior coxæ armed with an elongate filiform spine, obtuse at its apex and having a brush-like tuft of white hair at the extremity: these spines as well as the legs are ferruginous; the thorax beneath, the coxæ and trochanters covered with long white pubescence; the tibiæ and tarsi have a white pubescence above, the posterior femora having some long fuscous pubescence within; the basal joint of the posterior tarsi broadly dilated, angulated beneath, convex exteriorly, concave within. The pubescence of the abdomen longer, but coloured as in the female, the apical segment fringed with short black hairs.

Hab. Albania.

Note.—The name *Habrophora*, as I have lately ascertained, having been preoccupied by Erichson in Coleoptera, *Habropoda* must be substituted.

Genus 51. ANTHOPHORA.

Apis, pt., *Linn. Syst. Nat.* 953 (1766).
Podalirius, *Latr.* (olim) *Hist. Nat. Cr. et Ins.* iii. p. 378 (1802) (Saropoda, Anthophora, Centris).
Anthophora, *Latr. Hist. Nat. Cr. et Ins.* xiv. 45. (1804) (Saropoda).
Megilla, pt., *Fabr. Syst. Piez.* p. 328 (1804).
Lasius, pt., *Jur. Hym.* (1807).

1. ANTHOPHORA RETUSA. B.M.

Apis retusa, *Linn. Faun. Suec.* 1689; *Syst. Nat.* i. 954. 8, et *Cab. Mus. Linn. Soc.* ♀.
Apis Haworthana, *Kirby, Mon. Ap. Angl.* ii. 307. 70 ♂.
Anthophora Haworthana, *Curtis, Brit. Ent.* viii. t. 357 ♂.
Smith, Zool. iii. 895. 2 ♂ ♀.
Anthophora retusa, *St. Farg. Hym.* ii. 69. 38.
Megilla retusa, *Nyland. Revis. Ap. Boreal.* p. 265. 2.

Hab. Britain; France; Germany; Italy; Denmark; Sweden.

2. ANTHOPHORA ACERVORUM. B.M.

Apis acervorum, *Fabr. Syst. Ent.* p. 382. 21 ♀ (nec *Linn.*); *Ent. Syst.* ii. 322. 36.
Apis Hispanica, *Panz. Faun. Germ.* 55. 6 ♂? (nec *Fabr.*).
Apis retusa, *Kirby, Mon. Ap. Angl.* ii. 296. 69 ♂ ♀.
Megilla acervorum, *Fabr. Syst. Riez.* p. 328. 2.
Nyland. Revis. Ap. Boreal. p. 266. 2.
Anthophora retusa, *Blanch. Hist. Nat. des Ins.* iii. 406. 4. t. 7. f. 2 ♂.
Smith, Zool. iii. 894. 1.

Hab. Britain; France; Germany; Denmark.

3. ANTHOPHORA PILIPES. B.M.

Apis pilipes, *Fabr. Ent. Syst.* ii. 326 ♂.
Apis plumipes, *Pallas, Spicil. Zool.* i. fasc. 9. 24. t. 1. f. 14?
Megilla pilipes, *Fabr. Syst. Piez.* p. 329. 6; p. 326. 54.
Nyland. Revis. Ap. Boreal. p. 266. 3.
Anthophora pilipes, *St. Farg. Hym.* ii. 57. 31 ♂ ♀.
Blanch. Hist. Nat. des Ins. iii. 406. 1.
Lucas, Explo. Sc. Algér. iii. 147. 13.
Anthophora hirsuta, *Eversm. Bull. Mosc.* xxv. 109. 4.

Hab. France; Italy; Germany.

4. ANTHOPHORA PARIETINA. B.M.

Apis parietina, *Fabr. Ent. Syst.* ii. 323. 38.
Megilla parietina, *Fabr. Syst. Piez.* p. 329. 3.
Nyland. Ap. Boreal. p. 244; *Revis. Ap. Boreal.* p. 267. 4.
Anthophora parietina, *Latr. Ann. Mus. d'Hist. Nat.* iii. 252.
Spin. Ins. Lig. fasc. 1. p. 126.
St. Farg. & Serv. Ency. Méth. x. 798. 2.
St. Farg. Hym. ii. 79. 46.

Hab. France; Italy; Denmark; Sweden.

5. ANTHOPHORA NIDULANS. B.M.

Apis nidulans, *Fabr. Ent. Syst.* ii. 330. 72 ♀.
Centris nidulans, *Fabr. Syst. Piez.* p. 357. 11.
Apis quadrifasciata, *De Vill. Entom.* iii. 319. 90.
Anthophora nidulans, *St. Farg. Hym.* ii. 27. 2 ♂ ♀.
Brullé, Hist. Nat. Il. Canar. iii. p. 84. 8.
Lucas, Explo. Sc. Algér. iii. 142. 4.

Hab. France; Madeira; Algeria; Albania; Italy.

The specimens of this species from Madeira have the markings, as well as the pubescence, similarly distributed, but the latter is more or less fulvous.

6. ANTHOPHORA FURCATA. B.M.

Apis furcata, *Panz. Faun. Germ.* 56. 8 ♂.
Kirby, Mon. Ap. Angl. ii. 288. 64. t. 17. f. 5, 6.
Anthophora furcata, *St. Farg. Hym.* ii. 82. 49.
Eversm. Bull. Mosc. XXV. 111. 6.
Saropoda furcata, *Smith, Zool.* iii. 893. 3.
Megilla furcata, *Nyland. Ap. Boreal.* p. 245. 4.

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

7. ANTHOPHORA QUADRIMACULATA. B.M.

Apis quadrimaculata, *Panz. Faun. Germ.* 56. 7 ♂.
Megilla quadrimaculata, *Fabr. Syst. Piez.* p. 331. 14.
Nyland. Ap. Boreal. p. 244.
Apis vulpina, *Kirby, Mon. Ap. Angl.* ii. 290. 65 ♂ (nec *Panz.*).
Apis subglobosa, *Kirby, Mon. Ap. Angl.* ii. 295. 68 ♀.
Anthophora quadrimaculata, *St. Farg. Hym.* ii. 84. 51 ♂ (*type in Coll. Westw.*).
Eversm. Bull. Mosc. XXV. 110. 5.
Anthophora mixta, *St. Farg. Hym.* ii. 85. 52 ♀ (*type in Coll. Westw.*).
Saropoda vulpina, *Smith, Zool.* iii. 892. 2 ♂ ♀.

Hab. France; Germany; Denmark; Sweden.

8. ANTHOPHORA ALBIGENA.

Anthophora albigena, *St. Farg. Hym.* ii. 28. 3 ♂ ♀
Lucas, Explo. Sc. Algér. iii. 142. 5. t. 1. f. 2.

Hab. France; Sicily; Algeria.

9. ANTHOPHORA VARA.

Anthophora vara, *St. Farg. Hym.* ii. 43. 17 ♂.

Hab. France (Paris).

10. ANTHOPHORA BINOTATA.

Anthophora binotata, *St. Farg. Hym.* ii. 38. 12 ♂.

Hab. France (Paris; Lyons).

11. ANTHOPHORA SQUALIDA.

Anthophora squalida, *St. Farg. Hym.* ii. 53. 27.

Hab. France (Paris).

12. ANTHOPHORA PUBESCENS. B.M.

Apis pubescens, *Fabr. Ent. Syst.* ii. 336. 95.
Anthophora pubescens, *Fabr. Syst. Piez.* p. 377. 20.
St. Farg. Hym. ii. 54. 28 ♀.

Hab. Italy; Algeria (Oran).

13. ANTHOPHORA PODAGRA.

Anthophora podagra, *St. Farg. Hym.* ii. 44. 18 ♂.

Hab. France (Montpellier).

14. ANTHOPHORA GARRULA.

Megilla garrula, *Germar, Faun. Ins. Europ.* fasc. 3. t. 14.

Hab. Germany.

15. ANTHOPHORA FEMORATA.

Anthophora femorata, *Latr. Gen. Crust. Ins.* iv. 176.
Panz. Faun. Germ. 105. 18 ♂. 19 ♀.
St. Farg. Hym. ii. 45. 19.

Hab. France (Montpellier; St. Séver); Germany. (Coll. W. W. Saunders, Esq.)

16. ANTHOPHORA FLABELLIFERA.

Anthophora flabellifera, *St. Farg. Hym.* ii. 40. 14 ♂.

Hab. Lyons; Algeria (Oran). (Coll. W. W. Saunders, Esq.)

17. ANTHOPHORA DUBIA. B.M.

Female. Length 6 lines.—Black, the face clothed with pale pubescence, the clypeus and labrum coarsely punctured, the disk

of the thorax clothed with black pubescence, enclosed by a circle of short fulvous pubescence; beneath, the pubescence is black; the fringe of the femora intermixed with pale hairs; the legs dark rufo-piceous, the posterior tibiæ and the basal joint of the tarsi covered with short fulvous pubescence; the wings fusco-hyaline, the nervures black. Abdomen clothed with a dense short fulvous pubescence, which is brightest on the two basal segments, on the third and following segments it becomes ochraceous, the fifth segment has a little bright fulvous pubescence on the marginal fringe, on the apical one it is ferruginous.

Hab. South of France.

18. ANTHOPHORA DUFOURII.

Anthophora Dufourii, *St. Farg. Hym.* ii. 75. 43.

Hab. France; Spain.

19. ANTHOPHORA CRASSIPES.

Anthophora crassipes, *St. Farg. Hym.* ii. 41. 15. ♂.

Hab. France (St. Germains).

20. ANTHOPHORA CRINIPES. B.M.

Female. Length 5 lines.—Black, clothed with a pale ochraceous pubescence, inclining to hoary-gray on the face, metathorax, femora beneath, and on the posterior tibiæ above; at the apex of the femora and tibiæ is a little bright yellow or golden pubescence; the apical margins of the segments of the abdomen are pale testaceous, and have a fringe of nearly white pubescence; the abdomen beneath and the legs are rufo-piceous; the fourth and fifth ventral segments have a mixture of ferruginous hairs with the pale pubescence which fringes them; the wings subhyaline, the nervures ferruginous; the apical joints of all the tarsi ferruginous; the flagellum of the antennæ rufo-piceous beneath.

Male.—Rather smaller than the female, clothed with similar pubescence; the clypeus, a transverse line above, the labrum and scape in front, yellow; the margins of the labrum and two round spots at the base fuscous. The intermediate legs elongate, the basal joint of the tarsi dilated towards the apex, and having on its apical half in front a short fringe of black pubescence; the entire joint as well as the tibiæ behind covered with a thin long pale pubescence; the apical joint of the tarsi black, and having a short fringe on each side of black pubescence.

Hab. Italy.

21. ANTHOPHORA BALNEORUM.

Anthophora balneorum, *St, Farg. Hym.* ii. 81. 48.

Hab. The Pyrenees.

22. ANTHOPHORA FULVIPES.

Anthophora fulvipes, *Eversm. Bull. Mosc.* xix. 438; xxv. 115. 12.

Hab. Russia.

23. ANTHOPHORA ATRICILLA.

Anthophora atricilla, *Eversm. Bull. Mosc.* ii. 437. 2. t. 4. f. 3; xxv. 116. 16.

Hab. Russia.

24. ANTHOPHORA IREOS.

Apis Ireos, *Pallas, Iter.* ii. 731. 93 ♂.
Fabr. Ent. Syst. ii. 331. 75, and *Cab. Mus. Dom. Banks.*
Anthidium Ireos, *Fabr. Syst. Piez.* p. 366. 4.
Anthophora Ireos, *St. Farg. & Serv. Ency. Méth.* x. 798. 4.

Hab. Russia.

25. ANTHOPHORA LEPIDA.

Anthophora lepida, *Eversm. Bull. Mosc.* ii. 439. 5; xxv. 116. 14.

Hab. Russia.

26. ANTHOPHORA VETULA.

Anthophora senilis, *Eversm. Bull. Mosc.* xix. 438. 3 (nec *Illig.*).
Anthophora vetula, *Eversm. Bull. Mosc.* xxv. 117. 17.

Hab. Russia.

27. ANTHOPHORA PERSONATA.

Megilla personata, *Illig. Mag.* v. 22.
Waltl, Reise. p. 209.
Eversm. Bull. Mosc. xxv. 108. 1.

Hab. Russia.

28. ANTHOPHORA ALBIFRONS.

Anthophora albifrons, *Eversm. Bull. Mosc.* xxv. 115. 13.

Hab. Russia.

29. ANTHOPHORA PEDATA.

Anthophora pedata, *Eversm. Bull. Mosc.* xxv. 116. 15.
Hab. Russia.

30. ANTHOPHORA FULVA.

Anthophora fulva, *Eversm. Bull. Mosc.* xxv. 114. 11.
Hab. Russia.

31. ANTHOPHORA DUBIA.

Anthophora dubia, *Eversm. Bull. Mosc.* xxv. 114. 10.
Hab. Russia.

32. ANTHOPHORA SEGNIS.

Anthophora segnis, *Eversm. Bull. Mosc.* xxv. 113. 9.
Hab. Russia.

33. ANTHOPHORA CINEREA.

Anthophora cinerea, *Eversm. Bull. Mosc.* xxv. 112. 7.
Hab. Russia.

34. ANTHOPHORA QUADRICINCTA.

Anthophora quadricincta, *Eversm. Bull. Mosc.* xxv. 108. 2.
Hab. Russia.

35. ANTHOPHORA COGNATA.

Female. Length 5 lines.—Black, the clypeus and labrum have a glittering white pubescence, on the vertex it is fulvous intermixed with fuscous; the anterior margin of the clypeus, and an angular shape uniting with it, in the middle, the labrum and mandibles, yellow; a narrow line on the margin of the clypeus, a minute spot on each side of the labrum at the base, black; the tips of the mandibles ferruginous. Thorax, clothed above with a dense fulvo-ochraceous pubescence, the tips of the hairs fuscous; the wings subhyaline, nervures fuscous, the tegulæ pale testaceous; the legs fusco-ferruginous, the pubescence beneath black and sparing, above densely clothed with a yellowish-white pubescence, the basal joint of the tarsi beneath has an obscure ferruginous pubescence. Abdomen, the apical margins of the segments have a fascia of short fulvo-ochraceous pubescence, the fasciæ uniting at the extreme lateral margins; the second

and third segments have in the middle an abbreviated line of pubescence which unites with the marginal fasciæ; the apex of the abdomen fuscous.

This species bears a strong resemblance to the *Saropoda bimaculata*.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

36. ANTHOPHORA INTERMEDIA. B.M.

Anthophora zonata, *Brullé, Expéd. Sc. de Morée*, iii. 331. 737. (nec *Fabr.*).

Anthophora intermedia, *St. Farg. Hym.* ii. 64. 35.

Hab. Morea; Algeria (Oran).

37. ANTHOPHORA AFFINIS. B.M.

Anthophora affinis, *Brullé, Expéd. Sc. de Morée*, iii. 330. 736.
St. Farg. Hym. ii. 61. 33.
Lucas, Explo. Sc. Algér. iii. 148. 15.

Hab. Morea; Algeria (Oran).

38. ANTHOPHORA RUFA.

Anthophora rufa, *St. Farg. Hym.* ii. 48. 22 ♀.

Hab. Dalmatia.

39. ANTHOPHORA SICULA.

Female. Length 6¼ lines.—Black, clothed with pale fulvous pubescence, the legs ferruginous, the scopa of a bright fulvous above, beneath short, sparing and fuscous; the apical joints of the tarsi ferruginous, the calcaria black. Abdomen densely pubescent, the cilia on the margins of the segments being long and dense; abdomen, beneath fusco-ferruginous, the margins of the segments ciliated with pale fulvous hairs. The wings fusco-hyaline.

Male.—The pubescence on the head, thorax and abdomen short, dense and fulvous, that on the cheeks, legs and abdomen beneath black; the scape in front, clypeus and face on each side, also the labrum and a spot at the base of the mandibles white; wings as in the other sex.

Hab. Sicily. (Coll. F. Smith.)

40. ANTHOPHORA PRUINOSA.

Female. Length 6 lines.—Black, the face, thorax above, two

basal segments of the abdomen and the posterior tibiæ above, clothed with a cinereous pubescence, more or less tinged with ochraceous; that on the tibiæ has a silvery effulgence in certain lights; on the vertex, sides of the head, and the entire insect beneath it is black; the legs are dark rufo-piceous; the wings subhyaline, their apical margins faintly clouded; on the apical margin of the second segment is a narrow fringe of white pubescence; the third and apical segments have a thin black pubescence; the abdomen rufo-piceous beneath.

Male.—Clothed more densely than the female, but similarly coloured; the scape in front, the clypeus and labrum yellow, the clypeus has two rounded black maculæ at the base; its anterior margin and two spots on the labrum black; the thorax and cheeks have a cinereous pubescence; the anterior and intermediate femora have a fringe of that colour; the intermediate legs elongate, their tibiæ have a long fringe of white pubescence behind; the basal joint of their tarsi fringed in front with short, and behind with long black pubescence, the second, third and fourth joints pale testaceous.

Hab. Sicily. (Coll. F. Smith.)

41. ANTHOPHORA HISPANICA. B.M.

Apis hispanica, *Fabr. Ent. Syst.* ii. 318. 17 ♂.
Megilla hispanica, *Fabr. Syst. Piez.* p. 328. 1.
Anthophora hispanica, *St. Farg. Hym.* ii. 55. 29.
Lucas, Explo. Sc. Algér. iii. 146. 11.
Eversm. Bull. Mosc. xxv. 108. 3?

Hab. Spain; Algeria (Oran).

42. ANTHOPHORA CANIFRONS.

Female. Length 7 lines.—Black, the clypeus has a narrow, abbreviated, yellow line in the centre, touching the anterior margin; the face has a cinereous pubescence, the tips of the hairs black. Thorax densely clothed with a short obscure dirty yellow pubescence; on the sides and on the metathorax it is nearly white; legs dark rufo-piceous, the pubescence beneath black; above, the pubescence is of a yellow cinereous; the basal joint of the intermediate and posterior tarsi have a black pubescence in front, posteriorly it is pale ochraceous. Abdomen rufo-piceous beneath; above, the apical margins of the segments have a very narrow white marginal fascia, which is continued beneath; the third and fourth fasciæ are fuscous in the middle.

Hab. Canary Islands. (Coll. F. Smith.)

43. ANTHOPHORA ATRO-ALBA. B.M.

Anthophora atro-alba, *St. Farg. Hym.* ii. 73. 41.
Brullé, Hist. Nat. Il. Canar. iii. 84. 9.

Hab. The Canaries; Albania; Italy.

44. ANTHOPHORA PULVEROSA.

Female. Length 5½ lines.—Black, densely clothed with hoary pubescence, that on the disk of the thorax has an ochraceous tinge, on the abdomen it is very short and also tinged with ochraceous, that on the apex of the abdomen is dark fuscous; on the posterior tibiæ the pubescence is bright and glittering, faintly tinged with yellow, but at the apex of the intermediate tibiæ and on the anterior tarsi it is of a brighter yellow, the apical joints of the tarsi ferruginous; the flagellum beneath, the legs and abdomen beneath rufo-piceous; the wings hyaline, the nervures and tegulæ pale testaceous; on the apical margins of the segments of the abdomen is a fascia of pale pubescence.

Male.—Rather smaller than the female and having a similar dusty appearance, the pubescence being of a little brighter yellow; the scape in front, the clypeus, the face on each side, a line above the clypeus, the labrum and mandibles white, the latter ferruginous at their apex, the legs ferruginous; otherwise as in the female.

Hab. Canary Islands. (Coll. W. W. Saunders, Esq.)

45. ANTHOPHORA SOCIA.

Megilla socia, *Klug, Symb. Phys.* dec. v. t. 49. f. 6 ♀.

Hab. Syria.

46. ANTHOPHORA ROBUSTA.

Megilla robusta, *Klug, Symb. Phys.* dec. v. t. 49. f. 5 ♀.

Hab. Syria.

47. ANTHOPHORA CONCINNA.

Megilla concinna, *Klug, Symb.* dec. v. t. 49. f. 11 ♂.

Hab. Syria. (Coll. F. Smith.)

48. ANTHOPHORA FARINOSA.

Megilla farinosa, *Klug, Symb. Phys.* dec. v. t. 50. f. 2 ♀.

Hab. Arabia Felix.

49. ANTHOPHORA VALGA.
Megilla valga, *Klug, Symb. Phys.* dec. v. t. 49. f. 15 ♂.
Hab. Arabia.

50. ANTHOPHORA VETULA.
Megilla vetula, *Klug, Symb. Phys.* dec. v. t. 49. f. 3 ♂.
Hab. Arabia.

51. ANTHOPHORA SCOPIPES.
Anthophora scopipes, *Spin. Ann. Soc. Ent. Fr.* vii. 545.
Megilla scopipes, *Klug, Symb. Phys.* dec. v. t. 49. f. 1 ♂, 2 ♀.
Hab. Egypt.

52. ANTHOPHORA CALIGINOSA.
Megilla caliginosa, *Klug, Symb. Phys.* dec. v. t. 49. f. 7 ♀.
Hab. Egypt; Syria.

53. ANTHOPHORA CROCEA.
Megilla crocea, *Klug, Symb. Phys.* dec. v. t. 50. f. 1 ♀.
Hab. Nubia (New Dongala).

54. ANTHOPHORA INCANA.
Megilla incana, *Klug, Symb. Phys.* dec. v. t. 49. f. 12 ♀.
Hab. Egypt.

55. ANTHOPHORA ALTERNANS.
Megilla alternans, *Klug, Symb. Phys.* dec. v. t. 50. f. 3 ♀.
Hab. Egypt.

56. ANTHOPHORA LANATA.
Megilla lanata, *Klug, Symb. Phys.* dec. v. t. 49. f. 4 ♀.
Hab. Alexandria.

57. ANTHOPHORA MUCOREA.
Megilla mucorea, *Klug, Symb. Phys.* dec. v. t. 49. f. 13 ♂.
Hab. Egypt; Arabia.

58. ANTHOPHORA NUBICA. B.M.
Anthophora Nubica, *St. Farg. Hym.* ii. 33. 8 ♂.
Megilla Nubica, *Klug, Symb. Phys.* dec. v. no. 7. t. 49. f. 8, 9 ♂ ♀.
Hab. Africa (Nubia).

59. ANTHOPHORA CINERASCENS.

Anthophora cinerascens, *St. Farg. Hym.* ii. 51. 25 ♀.
Hab. Nubia.

60. ANTHOPHORA VIDUA.

Megilla vidua, *Klug, Symb. Phys.* dec. v. t. 49. f. 10 ♀.
Hab. Egypt (Saccahram).

61. ANTHOPHORA SAVIGNYI.

Anthophora Savignyi, *St. Farg. Hym.* ii. 47. 21 ♀.
Hab. Eygpt.

62. ANTHOPHORA SENESCENS.

Anthophora senescens, *St. Farg. Hym.* ii. 71. 39.
Hab. Algeria (Oran).

63. ANTHOPHORA VENTILABRIS.

Anthophora ventilabris, *St. Farg. Hym.* ii. 72. 40 ♂.
Hab. Algeria (Oran).

64. ANTHOPHORA ROMANDII.

Anthophora Romandii, *St. Farg. Hym.* ii. 87. 54.
Lucas, Explo. Sc. Algér. iii. 155. 26. t. 2. f. 7.
Hab. Algeria (Oran).

65. ANTHOPHORA BICILIATA.

Anthophora biciliata, *St. Farg. Hym.* ii. 83. 50.
Lucas, Explo. Sc. Algér. iii. 154. 25. t. 2. f. 4.
Hab. Algeria (Oran).

66. ANTHOPHORA CALCARATA.

Anthophora calcarata, *St. Farg. Hym.* ii. 42. 16 ♂ ♀.
Hab. Algeria (Oran).

67. ANTHOPHORA DISPAR. B.M.

Anthophora dispar, *St. Farg. Hym.* ii. 56. 30.
Lucas, Explo. Sc. Algér. iii. 146. 12. t. 1. f. 8.
Hab. Algeria (Oran).

68. ANTHOPHORA EPHIPPIUM.

Anthophora ephippium, *St. Farg. Hym.* ii. 67. 37 ♂.
Lucas, Explo. Sc. Algér. iii. 149. 17. t. 1. f. 5.
Hab. Algeria (Oran).

69. ANTHOPHORA FULVITARSIS. B.M.

Anthophora fulvitarsis, *Brullé, Expéd. Sc. de Morée,* iii. 329. 735.
St. Farg. Hym. ii. 62. 34.
Hab. Morea; Algeria (Oran).

70. ANTHOPHORA FERRUGINEA.

Anthophora ferruginea, *St. Farg. Hym.* ii. 78. 45.
Lucas, Explo. Sc. Algér. iii. 153. 23. t. 2. f. 6.
Hab. Algeria (Oran). (Coll. W. W. Saunders, Esq.)

71. ANTHOPHORA LITURATA.

Anthophora liturata, *St. Farg. Hym.* ii. 74. 42.
Lucas, Explo. Sc. Algér. iii. 152. 21. t. 2. f. 2.
Hab. Algeria (Oran).

72. ANTHOPHORA MAURITANICA.

Anthophora mauritanica, *Lucas, Explo. Sc. Algér.* iii. 205. t. 9. f. 4.
Hab. Algeria.

73. ANTHOPHORA NIGRO-CINCTA. B.M.

Anthophora nigro-cincta, *St. Farg. Hym.* ii. 76. 44.
Lucas, Explo. Sc. Algér. iii. 153. 22. t. 2. f. 5.
Hab. Algeria (Oran).

74. ANTHOPHORA NIGRO-FULVA.

Anthophora nigro-fulva, *St. Farg. Hym.* ii. 88. 55.
Lucas, Explo. Sc. Algér. iii. 155. 27. t. 2. f. 8.
Hab. Algeria (Oran).

75. ANTHOPHORA ORANIENSIS.

Anthophora Oraniensis, *St. Farg. Hym.* ii. 39. 19 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 143. 6. t. 1. f. 1.
Hab. Algeria (Oran).

76. ANTHOPHORA NASUTA.

Anthophora nasuta, *St. Farg. Hym.* ii. 66. 36.
Lucas, Explo. Sc. Algér. iii. 148. 16. t. 1. f. 9.

Hab. Algeria (Oran).

77. ANTHOPHORA NIGRO-MACULATA.

Anthophora nigro-maculata, *Lucas, Explo. Sc. Algér.* iii. 146. 10. t. 1. f. 3.

Hab. Algeria; Spain; Portugal.

78. ANTHOPHORA PENNATA. B.M.

Anthophora pennata, *St. Farg. Hym.* ii. 59. 32.
Lucas, Explo. Sc. Algér. iii. 147. 14. t. 1. f. 6.

Hab. Algeria (Oran).

79. ANTHOPHORA QUADRICOLOR.

Anthophora quadricolor, *Erichs. in Wagner Reis. in der Regents. Algier.* iii. 193. 54. t. 9.
Lucas, Explo. Sc. Algér. iii. 154. 24.

Hab. Africa.

80. ANTHOPHORA ATRIFRONS.

Female. Length 6 lines.—Black, the head clothed with black pubescence, on the vertex is a little fulvous pubescence; the thorax and abdomen above clothed with bright fulvous pubescence; on the disk of the thorax between the wings, not reaching the tegulæ, is a rounded patch of black pubescence, there is also a little in the middle of the two basal segments; the entire pubescence of the legs and of the body beneath is black; towards the apex of the abdomen the pubescence is paler than the rest; wings of a smoky hyaline.

Hab. Cape of Good Hope. (Coll. F. Smith.)

81. ANTHOPHORA BIPARTITA. B.M.

Female. Length 7½ lines.—Black, the face thinly covered with a short griseous pubescence, mixed with black at the sides and on the vertex; the clypeus has a narrow white line running down the middle, expanding into an angular shape at the margin of the clypeus, immediately beneath is a white spot on the labrum, which is covered with short griseous pubescence, as well as the sides of the head and the cheeks. Thorax densely pubescent above, the anterior portion as far as the tegulæ black; posteriorly

fulvous; the wings dark fuscous, having a purple iridescence; the coxæ and femora fusco-ferruginous, the pubescence of the legs black, the posterior tibiæ and the basal joint of the tarsi have a dense fringe of that colour. Abdomen shining, finely punctured and having a little black pubescence at the sides and apex, beneath obscurely ferruginous towards the base.

Hab. Port Natal.

82. ANTHOPHORA VESTITA. B.M.

Female. Length 6 lines.—Black, the head covered with a dense white pubescence, the labrum covered with the same; the mandibles have their tips and a minute spot at their base yellow. Thorax densely pubescent, that on the disk is a mixture of black and pale ochraceous, on the metathorax it is very pale fulvous, and beneath it is white, the legs ferruginous; the femora beneath, and the posterior tibiæ and basal joint of the tarsi above, clothed with white pubescence, that on the anterior and intermediate legs above is of a yellowish-white, on the tarsi beneath it is fulvo-ferruginous; the calcaria ferruginous; the wings subhyaline, having a fulvous tinge, the nervures black, the tegulæ pale testaceous. Abdomen densely clothed above with a short fulvo-ochraceous pubescence.

Hab. Port Natal.

83. ANTHOPHORA PLUMIPES. B.M.

Apis plumipes, *Fabr. Ent. Syst.* ii. 326. 55, and *Cab. Mus. Dom. Banks.*

Centris plumipes, *Fabr. Syst. Piez.* p. 356. 7 ♀.

Anthophora atrocincta, *St. Farg. Hym.* ii. 35. 10 ♂.

Fabricius has given the habitat for this insect India, but this must be an error; it appears to be a common African species.

Hab. Senegal; the Gambia.

84. ANTHOPHORA NIVEA.

Anthophora nivea, *St. Farg. Hym.* ii. 52. 26 ♀.

Hab. Senegal.

85. ANTHOPHORA CALENS. B.M.

Anthophora calens, *St. Farg. Hym.* ii. 49. 23 ♀.

Hab. Senegal.

86. ANTHOPHORA BASALIS. B.M.

Female. Length 7½ lines.—Black, the head densely clothed with a short black pubescence, the apex of the clypeus naked, obliquely truncate and roughly punctured, the labrum pubescent and the mandibles ciliated with black hairs beneath, their tips pale testaceous; the thorax above and the first segment of the abdomen densely clothed with a rich fulvous pubescence; the legs entirely black; the wings fuscous, their nervures black, the tegulæ pale rufo-testaceous. Abdomen, the fifth and apical segment covered with black pubescence, and having a little pale pubescence laterally; beneath, obscurely rufo-piceous, the third, fourth and fifth segments having on each side a pale fringe.

Hab. South Africa. (Coll. Dr. A. Smith.)

87. ANTHOPHORA PULCHRA. B.M.

Female. Length 5 lines.—Black, the clypeus, a triangular shape above, the face on each side, the labrum, a spot on the scape in front, and the mandibles, yellowish-white; an elongate stripe on each side of the clypeus, its anterior margin and two minute dots at the base of the labrum black, the tips of the mandibles ferruginous; the flagellum fulvous beneath; the face has a griseous pubescence, on the vertex it is ochraceous. Thorax, the disk clothed with fulvo-ochraceous pubescence, paler on the sides, and beneath of a bluish-white, in some individuals it has a greenish tinge; the wings subhyaline, the nervures fuscous; the legs rufo-piceous and having a little black pubescence beneath; the tibiæ and the basal joint of the anterior and intermediate tarsi clothed with white pubescence, which has usually more or less of a yellow tinge, sometimes it is tinged with blue or green; the basal joint of the posterior tarsi has usually a patch of pale pubescence at the base, but it is frequently black. Abdomen, the apical margins of the four basal segments have fasciæ of bluish-white pubescence, the fifth segment has a little white pubescence on each side, the sixth is dark rufo-piceous, and has some fuscous pubescence on each side.

Var. *a*. having an oblique quadrate spot on each side of the clypeus, its anterior margin ferruginous, the spots on the labrum obsolete.

Male.—Closely resembles the female, but has only a narrow black line on each side of the clypeus; in other respects as in the other sex.

Hab. Australia (Cape Upstart; Moreton Bay; Hunter River).

88. ANTHOPHORA CINGULATA. B.M.

Andrena cingulata, *Fabr. Ent. Syst.* ii. 314. 30.
Megilla cingulata, *Fabr. Syst. Piez.* p. 332. 18, and *Mus. Dom. Banks.*
Megilla cincta, *Fabr. Syst. Piez.* p. 330. 9, var. ♀, *Mus. Dom. Banks.*
Anthophora cingulata, *St. Farg. Hym.* ii. 46. 20.

Hab. Australia.

89. ANTHOPHORA ÆRUGINOSA. B.M.

Female. Length 5 lines.—Black, the head and thorax densely covered with short green pubescence, varying in the tint in different individuals; the clypeus, labrum, mandibles, and a triangular spot above the clypeus, yellow; the clypeus has on each side at the base a quadrate black spot, which is emarginate at its inferior side; the labrum has two fuscous dots at the base, and the tips of the mandibles are fusco-ferruginous, the flagellum fulvous beneath. Thorax, the wings hyaline, the nervures fuscous, the tegulæ pale testaceous; legs rufo-piceous; beneath, their pubescence is black; the pubescence of the tarsi black, the intermediate and posterior pairs having a little green at their base above; the posterior tibiæ have a line of black pubescence at their base above. Abdomen rufo-piceous beneath; above, the extreme apex covered with black pubescence.

Male.—Closely resembling the other sex, but having the scape yellow in front; the cheeks and anterior femora beneath have a long dense white pubescence; the intermediate tibiæ and tarsi are fringed with long black pubescence in front, and with white behind; the posterior tarsi have a dense black pubescence; otherwise as in the female.

Hab. Australia (Hunter River).

90. ANTHOPHORA ZONATA. B.M.

Apis zonata, *Linn. Syst. Nat.* i. 955. 19.
Andrena zonata, *Fabr. Ent. Syst.* ii. 311. 19.
Megilla zonata, *Fabr. Syst. Piez.* p. 331. 13.
Anthophora zonata, *St. Farg. Hym.* ii. 25. 1.

Hab. India; Ceylon; Philippine Islands; Hong Kong; North China.

91. ANTHOPHORA SUBCÆRULEA.

Anthophora subcærulea, *St. Farg. Hym.* ii. 30. 4 ♂ ♀.

Hab. India (Bengal). (Coll. W. W. Saunders, Esq.)

92. ANTHOPHORA NIVEO-CINCTA.

Female. Length 5 lines.—Black, a triangular spot above the clypeus, the clypeus, the face on each side, the labrum and mandibles, and a spot on the scape in front, yellow; the clypeus has on each side at the base an elongate quadrate spot, and its anterior margin narrowly, black; the labrum has a fuscous spot on each side at the base, the apex of the mandibles and the flagellum ferruginous; the pubescence on the face and cheeks white, on the vertex and disk of the thorax it is pale fulvous, the tips of the hairs being black; the pubescence on the sides of the thorax, beneath, and also on the metathorax, white; the legs ferruginous, above densely covered with white pubescence; beneath it is black. Abdomen, the margins of the segments have a fascia of white pubescence, the fifth is covered with the same, the apex fuscous; beneath, the abdomen is ferruginous.

Hab. India. (Coll. J. S. Baly, Esq.)

93. ANTHOPHORA FASCIATA.

Megilla fasciata, *Fabr. Syst. Piez.* p. 331. 12.

Hab. India.

94. ANTHOPHORA CONFUSA.

Female. Length 6 lines.—Black, a minute triangular spot above the clypeus, a line down its centre, a transverse line on each side of it on the face at the anterior margin, and the labrum yellowish-white; the labrum has a narrow transverse line at the base, a rounded spot on each side at the base, and its anterior margin narrowly, black; the mandibles yellow, their apical half ferruginous; the face has a short cinereous pubescence, intermixed with long black hairs, on the cheeks it is white; the thorax has a dense obscure fulvous pubescence above, the tips of the hairs black; the wings fusco-hyaline; the pubescence on the thorax beneath, and the fringe on the femora white; legs fusco-ferruginous; the pubescence on the anterior pair above pale; on the intermediate ones fuscous, and having a white fringe behind; the posterior pair have black pubescence within and beneath, and white above; having an abbreviated black stripe at the base of the tibiæ. Abdomen, the four basal segments have a narrow band of short white pubescence on their apical margins, the fifth is fringed on each side with white.

Hab. India. (Coll. J. S. Baly, Esq.)

95. ANTHOPHORA BICINCTA. B.M.

Apis bicincta, *Fabr. Ent. Syst.* ii. 338. 101.
Centris bicincta, *Fabr. Syst. Piez.* p. 358. 16.
Anthophora bicincta, *St. Farg. Hym.* ii. 34. 9.
Hab. India.

96. ANTHOPHORA VIOLACEA. B.M.

Anthophora violacea, *St. Farg. Hym.* ii. 80. 47.
Hab. India.

97. ANTHOPHORA VILLOSULA. B.M.

Male. Length 6 lines.—Black, densely covered with hoary pubescence, the tips of the hairs on the vertex and thorax fuscous; the scape in front, the clypeus, labrum and mandibles yellow; on each side at the base of the clypeus a large rounded black spot, a similar fuscous spot on each side at the base of the labrum, the apical half of the mandibles ferruginous. Thorax, the wings subhyaline, the tegulæ and nervures rufo-piceous; the intermediate legs elongate, the basal joint of the tarsi clavate, having towards the apex in front a little fuscous pubescence intermixed with a few long pale hairs, behind ciliated with very long pale fuscous hairs; the apical or claw-joint has on each side a similar pubescence, that in front and behind on the intermediate and posterior tibiæ is yellowish; the tarsi have beneath a short dense dark brown pubescence; the apical joints of the tarsi ferruginous; the apical margins of the segments testaceous.

Hab. North China (Shanghai).

98. ANTHOPHORA ABRUPTA.

Anthophora abrupta, *Say, Bost. Journ. Nat. Hist.* i. 409. 1 ♂.
Hab. North America (Indiana).

99. ANTHOPHORA BOMBOIDES.

Anthophora bomboides, *Kirby, Faun. Boreal. Amer.* 271. 1.
Hab. North America.

100. ANTHOPHORA FUSCIPENNIS.

Female. Length 4¼ lines.—Black, the pubescence black, on the head it is sparing, the clypeus strongly punctured. Thorax moderately punctured, the wings fuscous, the apical joints of the tarsi ferruginous, their pubescence beneath ferruginous.

Abdomen shining, finely punctured, the base more strongly so, pubescent; on the apical margin of the fourth segment on each side is a patch of white pubescence.

Hab. North America. (Coll. F. Smith.)

101. ANTHOPHORA SPONSA. B.M.

Female. Length 6½ lines.—Black, the pubescence of the head black, the clypeus covered with large deep punctures, subcarinate in the centre; the labrum rugose. Thorax clothed above and on the sides with ochraceous pubescence; the wings subhyaline; the nervures black, the second submarginal cell narrowed towards the marginal and receiving the first recurrent nervure in the middle; the legs fusco-ferruginous, their pubescence entirely black; the basal segment of the abdomen covered with ochraceous pubescence, the following segments with black; beneath obscurely fusco-ferruginous; the apical half of the segments strongly punctured.

This species may very possibly prove to be the other sex of Say's *A. abrupta*.

Hab. United States.

102. ANTHOPHORA FRONTATA.

Anthophora frontata, *Say, Bost. Journ. Nat. Hist.* i. 409. 2 ♂.

Hab. North America (Louisiana).

103. ANTHOPHORA TAUREA. B.M.

Anthophora taurea, *Say, Bost. Journ. Nat. Hist.* i. 410. 3 ♂ ♀.

Hab. North America (Indiana).

104. ANTHOPHORA MARGINATA. B.M.

Female. Length 5½ lines.—Black, the head and thorax covered with grey pubescence, the anterior margin of the clypeus and the labrum coarsely rugose; the wings subhyaline; the thorax beneath and the femora have a long cinereous pubescence; the tibiæ and tarsi above have a pale ochraceous or dirty-white pubescence, the tarsi beneath have dark ferruginous pubescence, the apical joints ferruginous. Abdomen, a little cinereous pubescence at the base, the apical margins of the segments yellowish-white, naked.

Hab. Mexico.

105. ANTHOPHORA FLORIDANA. B.M.

Female. Length 6 lines.—Black, the pubescence on the head

entirely black, the clypeus strongly punctured; the thorax above, and the basal segment of the abdomen above, densely clothed with short ochraceous pubescence; the wings subhyaline; the second submarginal cell receiving the first recurrent nervure near its apex; the pubescence of the legs black; the abdomen smooth and shining, having a little black pubescence at the sides of the apical segments.

Male.—Like the female, with the following exceptions: the clypeus, the face on each side, and a narrow line above the clypeus yellow; the posterior legs more slender and elongate; the claw-joints ferruginous.

Hab. East Florida (St. John's Bluff.)

106. ANTHOPHORA MELALEUCA.

Anthophora melaleuca, *St. Farg. Hym.* ii. 32. 7 ♂.

Hab. Paraguay.

107. ANTHOPHORA APICALIS.

Anthophora apicalis, *Guér. Icon. Règ. Anim. Ins.* p. 455. t. 74. f. 4.

Hab. Cuba.

108. ANTHOPHORA DOMINGENSIS.

Anthophora Domingensis, *St. Farg. Hym.* ii. 32. 6 ♂.

Hab. St. Domingo.

109. ANTHOPHORA DIMIDIATA.

Male. Length 6 lines.—Head, thorax and legs black, the clypeus and labrum yellowish-white, immaculate, the labrum having a few scattered black hairs; the flagellum nigro-piceous beneath; the pubescence on the thorax very dense, short, and of a sooty-black, that on the legs is of the same colour, the scopa on the posterior legs long and dense; the wings hyaline, the nervures ferruginous. Abdomen violet and having a short scattered black pubescence.

Hab. Chili. (Coll. F. Smith.)

110. ANTHOPHORA CHILIENSIS.

Anthophora chiliensis, *Spin. Faun. Chili.* vi. 172. 2.

Male and female. Length 5 lines.—The pubescence cinereous; the tarsi of the female testaceous, the pubescence of the head, thorax, the first segment of the abdomen, the legs and venter

cinereous; the pubescence is black, but sparing, at the base of the second abdominal segment; all the segments have fasciæ of white pubescence.

Hab. Chili.

111. ANTHOPHORA TRISTRIGATA.

Anthophora tristrigata, *Spin. Faun. Chili.* vi. 171. 1.

Female. Length 5 lines.—Black; the pubescence on the face and thorax above white; the clypeus and legs above black; the abdomen has three white pilose fasciæ.

Hab. Chili.

112. ANTHOPHORA INCERTA.

Anthophora incerta, *Spin. Faun. Chili.* vi. 172. 3.

Female. Length 6 lines.—The antennæ, abdomen and legs black; the pubescence of the head and thorax in front pale fulvous.

Hab. Chili.

113. ANTHOPHORA GAYI.

Anthophora Gayi, *Spin. Faun. Chili.* vi. 173. 4.

Male. Length 4 lines.—Black; the pubescence cinereous; antennæ luteous, the scape black; the clypeus, labrum and anterior sides of the face white; the posterior femora swollen; the first joint of the posterior tarsi dilated, the apex bispinose.

Hab. Chili.

114. ANTHOPHORA DISTINGUENDA.

Anthophora distinguenda, *Spin. Faun. Chili.* vi. 173. 5.

Male. Length 4 lines.—The clypeus and antennæ in front yellow; the posterior femora swollen, but the tarsi simple; otherwise very like *A. Gayi.*

Hab. Chili.

115. ANTHOPHORA FULVIFRONS. B.M.

Female. Length 4½ lines.—Black, the face and the labrum clothed with fulvous pubescence; the cheeks have a cinereous pubescence; the antennæ and legs ferruginous; the thorax above has a short cinereous pubescence, on the middle of the disk it is sooty-black, and a line of similar pubescence passes off on each side to the humeral angles; the scutellum is also covered with

blackish pubescence; the wings fusco-hyaline, their nervures black; the tegulæ rufo-piceous, the pubescence of the legs black. Abdomen smooth and shining, at the base a little cinereous pubescence, the apical margins of the second, third and fourth segments have a narrow fascia of white pubescence, the apex fuscous.

Hab. Brazil (Para; Santarem).

116. ANTHOPHORA ALBIFRONS. B.M.

Female. Length 5¼ lines.—Black, the head densely clothed with long hoary pubescence; the mandibles ferruginous at their base and apex, pale yellow in the middle. Thorax densely clothed above with short ferruginous pubescence; the wings subhyaline, their nervures black; on the thorax beneath, coxæ and femora is a long white pubescence; legs fusco-ferruginous, clothed above with a pale glittering pubescence. Abdomen, the basal segment clothed above with ferruginous pubescence, the margins of the three following segments have a fascia of yellowish-white pubescence, between the fasciæ the pubescence is black.

Hab. South America.

117. ANTHOPHORA TECTA.

Female. Length 6½ lines.—Head and thorax black, the clypeus having a broad T-shaped white mark on the clypeus, its anterior margin ferruginous, the labrum yellowish-white, the margin broadly ferruginous, the mandibles ferruginous; the sides of the face covered with dense short white pubescence, the sides of the head and the cheeks densely covered with long white pubescence, on the vertex it is fulvous. Thorax clothed above with fulvous pubescence, on the middle it is fuscous, on the sides the fulvous colouring graduates into white, the femora fringed with yellowish-white pubescence; the legs rufo-testaceous, the legs above have a cinereous pubescence, the posterior tibiæ and the basal joint of the tarsi densely clothed above with white pubescence, the calcaria black. Abdomen fusco-æneous, the basal segment clothed with fulvous pubescence, on the second and third segments the pubescence is very sparing and black, the fourth and fifth densely clothed with very short griseous pubescence, the pubescence at the apex of the latter segment fuscous; the margins of the segments pale rufo-testaceous; beneath rufo-testaceous, the margins of the segments thinly fringed with long pale pubescence, the fifth ciliated with short fulvous pubescence.

Hab. Brazil? (Coll. F. Smith.)

118. ANTHOPHORA TRICOLOR. B.M.

Andrena tricolor, *Fabr. Ent. Syst.* ii. 310. 13 ♂.
Megilla tricolor, *Fabr. Syst. Piez.* p. 329. 7.
Anthophora tricolor, *St. Farg. Hym.* ii. 86. 53.

Hab. South America.

Female. This sex closely resembles the male, but has the head entirely black; the head has a griseous pubescence, the posterior tibiæ have exteriorly a white pubescence, the abdomen as in the male.

119. ANTHOPHORA RUFIPES.

Anthophora rufipes, *St. Farg. Hym.* ii. 50. 24 ♀.

Hab. —— ?

120. ANTHOPHORA MACULICORNIS.

Anthophora maculicornis, *St. Farg. Hym.* ii. 31. 5 ♂.

Hab. —— ?

121. ANTHOPHORA ACARENSIS. B.M.

Apis acarensis, *Fabr. Ent. Syst.* ii. 329. 68.
Centris acarensis, *Fabr. Syst. Piez.* p. 356. 9.

Hab. Guinea; South Africa (the Gambia).

Genus 52. DIPHAGLOSSA.

Diphaglossa, *Spin. Faun. Chili.* vi. 168.

Ocelli placed in a triangle on the vertex; the labial palpi 4-jointed, about the same length as the labium; the two basal joints stout, subclavate, the basal joint as long as the second and third, the three apical joints gradually decreasing in length, the two apical joints slender, inserted at the apex of the second joint; the labium obtuse and broad at the apex, which is emarginate; near the apex on each side is a notch; the angles of the apex rounded and having each a long slender filament, acute at its apex, a shorter filament is also produced in the notch on each side. Maxillary palpi 6-jointed, the joints slender and subclavate. The superior wings have one marginal and three submarginal cells.

1. DIPHAGLOSSA GAYI.

Diphaglossa Gayi, *Spin. Faun. Chili.* vi. 170. 1. t. 1. f. 1.

Male. Length 7 lines.—The pubescence fulvous; antennæ, mandibles and thorax black; abdomen and legs rufous.

Hab. Chili.

Genus 53. XYLOCOPA.

Apis, pt., *Linn. Syst. Nat.* i. 953 (1766).
Andrena, pt., *Latr. Hist. Nat. Ins.* iii. (1802).
Xylocopa, *Latr. Hist. Nat. Ins.* iii. (1802).
Mesotrichia, *Westw. Trans. Ent. Soc.* ii. 112 (1836).
Platynopoda, *Westw. Nat. Libr.* (1840).
Audinetia, *St. Farg. Hym.* ii. 203 (1841).
Schönnherria, *St. Farg. Hym.* ii. 207 (1841).

1. XYLOCOPA VIOLACEA. B.M.

Apis violacea, *Scop. Ent. Carn.* p. 305. 812. fig. 812.
Linn. Syst. Nat. i. 959. 38.
Fabr. Syst. Ent. p. 379. 2; *Ent. Syst.* ii. 315. 3.
Schäff. Icon. Ins. Ratisb. t. 102. f. 7, 8.
Schrank, Ins. Aust. p. 394. 795.
Rossi, Faun. Etrusc. ii. 99.
Christ. Hym. p. 119. t. 4. f. 5.
Panz. Faun. Germ. 59. 6.
Xylocopa violacea, *Fabr. Syst. Piez.* p. 338. 3.
Latr. Règ. Anim. v. 346.
St. Farg. & Serv. Ency. Méth. x. 794. 2.
Lucas, Hist. Nat. des Ins. iii. 410.
St. Farg. Hym. ii. 183. 13 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 166. 51.
Eversm. Bull. Mosc. xxv. 125. 1.
Xylocopa femorata, *Fabr. Syst. Piez.* p. 339. 4 ♂.
Reaum. Ins. vi. t. 5. f. 1, 2.

Hab. Europe; Algeria.

2. XYLOCOPA CYANESCENS. B.M.

Xylocopa cyanescens, *Brullé, Expéd. Sc. de Morée*, iii. 339. 754. t. 48. f. 8.
Lucas, Explo. Sc. Algér. iii. 166. 52.
Xylocopa minuta, *St. Farg. Hym.* ii. 190. 30.
Xylocopa taurica, *Erichs. Reis. in der Regents. Algier, von M. Wagner*, iii. 192. 52.

Hab. France (Montpellier); Morea; Algeria.

3. XYLOCOPA FUSCATA.

Female. Length 8 lines.—Fuscous, the antennæ ferruginous, slightly fuscous towards their apex above; the face on each side of the clypeus, which is strongly punctured, has a pale fulvous pubescence; the thorax and legs have a fulvous pubescence, palest on the former beneath, and very bright on the posterior tibiæ and tarsi; the legs ferruginous; wings subhyaline, the nervures and tegulæ rufo-testaceous. Abdomen ovate, the apical margins of the second and three following segments fringed with pale pubescence, interrupted in the middle; the apex bright fulvous; beneath rufo-testaceous, the apical segments fringed with ferruginous pubescence.

Hab. Albania (Yanina). (Coll. W. W. Saunders, Esq.)

4. XYLOCOPA LANATA. B.M.

Male. Length 6 lines.—Head and thorax black; the clypeus, a triangular shape above it, and the labrum, white; the antennæ ferruginous, the mandibles rufo-testaceous; the head and thorax have a dense white woolly pubescence, that on the disk of the latter has a yellow hue; the wings hyaline, having a pale fulvous stain, the nervures pale rufo-testaceous, the tegulæ white, having a ferruginous stain in front; the legs pale rufo-testaceous, having a pale golden fulvous pubescence. Abdomen dark testaceous, having on the basal segment a pale yellow pubescence, the apical segments clothed with bright fulvous; the apical margins rufo-testaceous, and having laterally a narrow white marginal fringe; beneath ferruginous.

Hab. Turkey.

5. XYLOCOPA CANTABRITA. B.M.

Xylocopa cantabrita, *St. Farg. Hym.* ii. 193. 35.

Hab. Spain.

6. XYLOCOPA SINUATIFRONS.

Xylocopa sinuatifrons, *Spin. Ann. Soc. Ent. Fr.* i. ser. 2. 143. (1843).

Hab. Spain.

7. XYLOCOPA HELLENICA.

Xylocopa hellenica, *Spin. Ann. Soc. Ent. Fr.* ser. 2. i. 144 (1843).

Hab. Spain.

8. Xylocopa lateritia.

Female. Length 9 lines.—Black, the face having a raised tubercle in front of the anterior stemma, between the antennæ; the margins of the clypeus slightly raised; the antennæ dark rufo-testaceous, the flagellum beneath palest; the thorax above and the first segment of the abdomen densely clothed with a short brick-red pubescence; wings very dark brown, having a violet iridescence; the legs entirely black; the abdomen very finely and closely punctured, towards the apex fringed at the sides with short black pubescence.

Hab. Isle of Johanna (Mozambique). (Coll. W. W. Saunders, Esq.)

9. Xylocopa Caribea.

Xylocopa caribea, *St. Farg. Hym.* ii. 202. 49.

Hab. Isle of Guadaloupe.

10. Xylocopa Caffra. B.M.

Apis caffra, *Linn. Syst. Nat.* i. 959. 39.
Fabr. Ent. Syst. ii. 319. 19.
Bombus caffrus, *Fabr. Syst. Piez.* p. 346. 17.
Xylocopa cafra, *St. Farg. Hym.* ii. 197. 41.

Hab. Africa.

11. Xylocopa crassa. B.M.

Xylocopa crassa, *St. Farg. Hym.* ii. 204. 52.

Hab. Africa.

This is probably the female of *torrida*, both having been sent together from Fernando Po on more than one occasion, with a note to this effect.

12. Xylocopa Africana. B.M.

Apis africana, *Fabr. Ent. Syst.* ii. 319. 20.
Bombus africanus, *Fabr. Syst. Piez.* p. 346. 18.
Xylocopa africana, *St. Farg. Hym.* ii. 198. 43.

Hab. Africa.

13. Xylocopa rufitarsis. B.M.

Xylocopa rufitarsis, *St. Farg. Hym.* ii. 191. 32.

Hab. Africa (Cape).

14. Xylocopa præusta.

Female. Length 10 lines.—Black, the head and thorax densely clothed with short golden-yellow pubescence, the scape in front and the clypeus yellow, the flagellum pale testaceous beneath. Thorax: the legs rufo-testaceous, the anterior coxæ and trochanters terminating in a sharp spine, the anterior tibiæ having a long dense fringe, pale above and black beneath, the tarsi having on both sides a long pale fringe; the intermediate tibiæ and tarsi have a long pale pubescence, that on the tarsi brightest, the posterior pairs have a similar pubescence; the tarsi beneath bright fulvous; wings fusco-hyaline. Abdomen: the base above has a pale golden-yellow pubescence, graduating to bright fulvous at the apex.

Hab. Africa. (Coll. F. Smith.)

15. Xylocopa obscurata.

Male. Length 9 lines.—Black, the head, thorax and basal segment of the abdomen densely clothed with short obscure fulvous pubescence; the scape in front yellow; the flagellum, except the two basal joints, pale testaceous beneath. Thorax: the wings fusco-hyaline, and having a faint purple iridescence; the legs beneath fusco-ferruginous, the anterior legs brightest; the legs have a pale fulvous pubescence, that on the tarsi beneath ferruginous, the posterior pair black above; the apical joints of the tarsi ferruginous, the claws black. Abdomen minutely and very closely punctured, rendering the surface opake; the pubescence short and black, that on the apical segment bright golden-yellow; beneath rufo-testaceous.

Hab. Africa. (Coll. F. Smith.)

16. Xylocopa grisescens. B.M.

Male. Length 9 lines.—Black, the pubescence on the face, thorax above, and legs, of a yellowish-grey, that on the tarsi and apex of the posterior tibiæ bright pale fulvous, on the four apical segments of the abdomen it is black and sparing, at the extreme lateral margins the pubescence is pale; the wings fusco-hyaline, their apical margins clouded, the nervures dark ferruginous; the metathorax rounded behind.

Hab. Algeria.

17. Xylocopa Cirtana.

Xylocopa cirtana, *Lucas, Explo. Sc. Algér.* iii. 167. 54. t. 4. f. 10.

Hab. Algeria (Constantine).

18. XYLOCOPA AMEDÆI.

Xylocopa Amedæi, *St. Farg. Hym.* ii. 188. 23. ♀
Lucas, Explo. Sc. Algér. iii. 167. 53. t. 4. f. 9.

Hab. North Africa (Tlemcen); Algeria (Oran; Constantine).

19. XYLOCOPA CAPENSIS. B.M.

Xylocopa Capensis, *St. Farg. Hym.* ii. 179. 8.

Hab. Cape of Good Hope.

20. XYLOCOPA ALBIFRONS.

Xylocopa albifrons, *St. Farg. Hym.* ii. 191. 31. ♂

Hab. Cape of Good Hope. (Coll. F. Smith.)

21. XYLOCOPA CAPITATA. B.M.

Female. Length 13 lines.—Black, the head nearly as wide as the thorax; the face clothed with short black pubescence, and having a short tubercle between the antennæ; the flagellum beneath rufo-piceous. Thorax: the disk smooth and shining, having a few scattered fine punctures; the sides of the disk have a short black pubescence, the metathorax rounded; wings very dark fuscous, having a rich purple iridescence; legs entirely black. Abdomen very smooth and shining, and having a few scattered fine punctures, the sides fringed with black pubescence.

Hab. Cape of Good Hope.

22. XYLOCOPA AMETHYSTINA. B.M.

Apis amethystina, *Fabr. Ent. Syst.* ii. 325. 51.
Andrena amethystina, *Latr. Ins.* iii. 375.
Xylocopa amethystina, *Fabr. Syst. Piez.* p. 341. 16.
St. Farg. Hym. ii. 182. 12.

Hab. India; Cape of Good Hope?

23. XYLOCOPA TARSATA.

Female. Length 7 lines.—Black, the head very closely punctured, having an elevated short carina between the antennæ; the thorax shining, closely punctured, except in the middle of the disk; the metathorax rounded behind; wings very dark violet; the posterior tarsi and apex of the tibiæ densely clothed with bright fulvous pubescence. Abdomen closely punctured, shining, the apex fringed with black hairs.

Hab. Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

24. XYLOCOPA OLIVACEA. B.M.

Apis olivacea, *Fabr. Ent. Syst.* ii. 319. 21 ♂.
Bombus olivaceus, *Fabr. Syst. Piez.* p. 347. 20.
Xylocopa luteola, *St. Farg. Hym.* ii. 198. 42 ♂.

Female. Length 7–8 lines.—Black, the face having a little short black pubescence, the thorax and basal segment of the abdomen densely clothed with short bright yellow pubescence; the wings subhyaline towards their base, their apical margins broadly dark fuscous; the legs entirely black.

Hab. Sierra Leone.

25. XYLOCOPA APICALIS. B.M.

Xylocopa apicalis, *White, MSS.*

Female. Length 10 lines.—Black, the face densely clothed with black pubescence; the thorax above and also the basal segment of the abdomen clothed with bright yellow pubescence; the wings dark fuscous, and having a violet tinge towards the base, the margins faintly brassy; the legs and abdomen have a black pubescence, the latter shining and thickly fringed at the sides, sparingly pubescent above, the margins of the segments narrowly rufo-testaceous.

Hab. Sierra Leone; the Gambia.

26. XYLOCOPA HOTTENTOTTA. B.M.

Female. Length 8 lines.—Black, the face very closely and strongly punctured; an elevated sharp carina runs from the base of the clypeus up to the anterior stemma; the flagellum, except the two basal segments, fulvous beneath; the disk of the thorax shining, the punctures scattered, the metathorax rounded behind; wings dark fuscous, having a purple iridescence.

Hab. Sierra Leone; Port Natal.

27. XYLOCOPA ALBICEPS. B.M.

Xylocopa albiceps, *Fabr. Syst. Piez.* p. 341. 13.
St. Farg. Hym. ii. 189. 27.

Hab. Africa; Sierra Leone; Guinea.

28. XYLOCOPA TORRIDA. B.M.

Mesotrichia torrida, *Westw. Trans. Ent. Soc. Lond.* ii. 113. 1 ♂ ♀.

Hab. Tropical Africa; Fernando Po.

29. XYLOCOPA FLAVO-RUFA. B.M.

Apis flavo-rufa, *De Geer, Mém.* vii. 605. t. 45. f. 1.
Oliv. Ency. Méth. iv. 63. 3.
Xylocopa trepida, *Fabr. Syst. Piez.* p. 340. 10.
Hab. South Africa (Port Natal).

30. XYLOCOPA CALENS. B.M.

Xylocopa calens, *St. Farg. Hym.* ii. 196. 40 ♀.
Hab. Africa (Port Natal; Abyssinia); Madagascar.

31. XYLOCOPA CONJUNCTA. B.M.

Male. Length 1 inch 3 lines.—Rufo-testaceous, the scape of the antennæ, as well as the flagellum in front, a spot on each side of the vertex touching the eyes, the margins of the clypeus, and a line down the centre, a transverse line above, a line across at the base of the labrum, and a spot at the base of the mandibles, yellow; the entire insect has a short ochraceous pubescence; in parts, the pubescence has a fulvous tinge, as that on the legs and at the apex of the abdomen; the breast, the femora, tibiæ, coxæ and trochanters nigro-piceous; wings fulvo-hyaline, the nervures ferruginous; the abdomen beneath has on each segment a broad yellow stripe.

Hab. South Africa.

32. XYLOCOPA COMBUSTA. B.M.

Female. Length 13 lines.—Black, the clypeus having the margins a little raised, smooth and shining, also a central smooth line, forming a trident; from the base of the clypeus a smooth raised line passes upwards and encloses the anterior stemma; the face densely clothed with short black pubescence. Thorax: the posterior margin of the scutellum slightly raised and acute; wings deep fuscous, having a brilliant metallic green iridescence; the legs black. Abdomen elongate, shining, and sparingly punctured in the middle, closely so at the sides, towards the apex fringed with black pubescence, at the extreme apex a little bright ferruginous pubescence.

Male. Length 12 lines.—Very closely resembling the female; the scape in front, the clypeus and a triangular shape above it, a minute spot on each side beneath the anterior stemma, another on each side of the labrum, and a small one at the base of the mandibles, yellow; sometimes a minute yellow spot on the second joint of the flagellum in front; the tarsi beneath have a bright ferruginous pubescence; the intermediate legs have the

femora compressed beneath, and expanded, forming a flattened angular shape, the tarsi a little dilated, densely ciliated on both sides with long fulvous pubescence; the posterior tibiæ bent inwards, the tarsi covered exteriorly with long black pubescence: otherwise as in the other sex.

Hab. Congo.

33. XYLOCOPA USTULATA.

Female. Length 7¼ lines.—Black, the face densely covered with griseous pubescence, the mandibles and antennæ ferruginous, the flagellum obscure above; the disk of the thorax very glossy and sparingly punctured; in front, clothed with griseous pubescence; the wings dark fuscous, having a violet iridescence, subhyaline at their extreme base; the anterior legs ferruginous beneath, the intermediate and posterior pairs obscurely ferruginous, and clothed above with black pubescence. Abdomen shining, very closely punctured at the sides, sparingly so in the middle, naked; the apex fringed with black pubescence.

Male.—Exactly corresponds with the other sex, but has a little white pubescence on the sides of the thorax beneath the wings, and also a little at the base of the abdomen.

Hab. The Gambia. (Coll. F. Smith.)

34. XYLOCOPA VARIPES. B.M.

Female. Length 9 lines.—Black, the pubescence on the head, thorax, basal segment of the abdomen above, ochraceous; that on the thorax inclining to fulvous; the lateral margins of the clypeus slightly raised, and having also a central raised carina; the wings dark fuscous, and having a purple iridescence; the anterior tibiæ and tarsi, the intermediate tibiæ above, as well as the posterior pair, clothed with fulvo-ochraceous pubescence; the intermediate tarsi have a bright ferruginous pubescence with a tuft of ochraceous at their base above, the posterior tarsi have a dark fuscous pubescence with a little bright ferruginous at the apex, the tibiæ have also a little bright ferruginous at their apex above. Abdomen, the second, third and fourth segments fringed at the sides with black pubescence, the fifth and sixth are fringed with fulvo-ochraceous pubescence, the apex with bright ferruginous.

Hab. South Africa (Fernando Po); Sierra Leone.

35. XYLOCOPA IMITATOR. B.M.

Female. Length 9 lines.—Black, the face has a griseous pubescence, that on the cheeks snow-white; the flagellum except the three basal joints testaceous beneath. Thorax, smooth and

shining on the disk, the sides of which are densely clothed with short black pubescence; wings very dark fuscous, having a bright purple iridescence; the legs have a black pubescence. Abdomen shining, finely and closely punctured at the sides, the punctures more distant in the middle; the extreme apex has a little bright ferruginous pubescence.

Hab. Sierra Leone.

This species very closely approaches the *X. albiceps*, but it is one-third larger, the wings are of a uniform deep purple, not lighter towards the base, as in *X. albiceps*, nor is the abdomen so closely punctured.

36. XYLOCOPA MODESTA.

Female. Length 6½ lines.—Black, the face densely covered with short black pubescence, the vertex fringed with black; the thorax and basal segment of the abdomen above densely clothed with short bright yellow pubescence; the wings dark fuscous at their apical margins, towards the base subhyaline, and having a faint purple iridescence; the legs black.

Male closely resembling the female, but having the face covered with cinereous pubescence, and the legs beneath rufo-piceous; the wings as in the female.

Hab. The Gambia. (Coll. F. Smith.)

37. XYLOCOPA LUNATA.

Xylocopa lunata, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), t. 7. fig. 2.

Hab. Tranquebar.

38. XYLOCOPA INDICA.

Xylocopa Indica, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), t. 7. f. 2.

Hab. Tranquebar. (Coll. W. W. Saunders, Esq.)

39. XYLOCOPA VERTICALIS. B.M.

Xylocopa verticalis, *St. Farg. Hym.* ii. 195. 38.

Hab. India.

40. XYLOCOPA VIRIDIPENNIS. B.M.

Xylocopa viridipennis, *St. Farg. Hym.* ii. 205. 54.

Hab. India; Philippine Islands.

41. XYLOCOPA TENUISCAPA. B.M.

Platynopoda tenuiscapa, *Westw. Nat. Libr.* xxxviii. 271. t. 23. f. 2.
(Audinetia) latipes, *St. Farg. Hym.* ii. 203. 51 ♂ ♀.

Hab. India (Madras); N. India (Silhet); Ceylon.

42. XYLOCOPA RUFICORNIS.

Xylocopa ruficornis, *Fabr. Syst. Piez.* p. 341. 12.

Hab. India.

43. XYLOCOPA LATIPES. B.M.

Apis latipes, *Drurp, Ill. Exot. Ins.* ii. 98. t. 48. f. 2 ♂.
Fabr. Ent. Syst. ii. 314. 1.
Xylocopa latipes, *Fabr. Syst. Piez.* p. 337. 1.
Xylocopa (Audinetia) Latreillii, *St. Farg. Hym.* ii. 206. 55.
Platynopoda latipes, *Westw. Nat. Libr.* xxxviii. 271. t. 23. f. 1.
Apis gigas?, *De Geer*, t. 3. p. 28. f. 15 ♀.
Christ. Hym. t. 4. f. 1, 2 ♀, 3 ♂.

Hab. India; Ceylon; Philippine Islands; China.

44. XYLOCOPA IRIDIPENNIS. B.M.

Xylocopa iridipennis, *St. Farg. Hym.* ii. 188. 23.

Hab. India.

45. XYLOCOPA FERRUGINEA.

Xylocopa ferruginea, *St. Farg. Hym.* ii. 187. 22.

Hab. India; Bengal.

46. XYLOCOPA FENESTRATA. B.M.

Apis fenestrata, *Fabr. Ent. Syst. Supp.* p. 273. 3–4.
Xylocopa fenestrata, *Fabr. Syst. Piez.* p. 339. 6.
St. Farg. Hym. ii. 184. 15.

Hab. India (Bengal).

47. XYLOCOPA COLLARIS. B.M.

Xylocopa collaris, *St. Farg. Hym.* ii. 189. 26.

Hab. India; Sumatra; Bengal.

48. XYLOCOPA ÆSTUANS. B.M.

Apis æstuans, *Linn. Syst. Nat.* i. 961. 53 ♂.
Fabr. Ent. Syst. ii. 323. 41.

Apis leucothorax, *De Geer, Mem.* iii. 573. 4. t. 28. f. 7.
Bombus æstuans, *Fabr. Syst. Piez.* p. 351. 44.
Xylocopa æstuans, *St. Farg. Hym.* ii. 193. 36.
Xylocopa pubescens, *Spin.* (*Klug, MSS.*) *Ann. Soc. Ent. Fr.* vii. 518. 64, and var. *a*, *b*, *c*, *d* (1838).

Hab. India.

49. XYLOCOPA OLIVIERI. B.M.

Xylocopa Olivieri, *St. Farg. Hym.* ii. 192. 34.

Hab. India; Bagdad.

50. XYLOCOPA ORICHALCEA.

Xylocopa orichalcea, *St. Farg. Hym.* ii. 181. 10.

Hab. Bengal; China.

51. XYLOCOPA NIGRO-CINCTA.

Female. Length 10 lines.—Head and thorax black; an elevated carina between the antennæ, the margin raised round the base of the clypeus, not continued to its anterior margin; the labrum has three elevated tubercles. Thorax: the disk smooth, shining, and very delicately punctured, the sides having a dense, short, black pubescence; the wings dark fusco-ferruginous, having a splendid violet iridescence, the legs have a dense black pubescence. Abdomen ferruginous, the apical margins of the segments have a black fascia, the fifth segment obscure, the sixth black, the sides of the abdomen ciliated with a dense black pubescence; the entire abdomen closely punctured; beneath is an elevated sharp longitudinal carina down the centre.

Hab. South America. (Coll. J. S. Baly, Esq.)

52. XYLOCOPA FLAVO-NIGRESCENS. B.M.

Male. Length 11 lines.—Black, the pubescence is short and dense, on head and thorax fulvo-ochraceous, at the margin of the basal segment of the abdomen it is bright yellow, gradually becoming more obscure towards the apex, where it is deep black, the apex and sides being fringed with long pubescence of that colour; the basal margin of the second and three following segments have a narrow line of bright yellow pubescence, subinterrupted in the middle, and not reaching the sides. The scape of the antennæ in front, and the flagellum, except the two basal joints, pale testaceous beneath; the wings fuscous, with a purple iridescence; the legs have a black pubescence; the anterior and intermediate tarsi have a long fringe of black pubescence in front,

and of pale yellow behind; the posterior femora incrassate, very broad at their base, which is produced and rounded posteriorly; beneath, the segments of the abdomen are fringed with long yellow pubescence.

Hab. Silhet.

53. XYLOCOPA ACUTIPENNIS. B.M.

Male. Length 10 lines.—Black, head much narrower than the thorax; eyes very large; the scape in front, the clypeus, a triangular shape above it, the labrum, and a minute spot at the base of the mandibles, yellow; the vertex covered with a brownish black pubescence, the disk of the thorax smooth and shining in the middle, the sides densely clothed with a short black pubescence, the mesothorax in front obscurely yellow; beneath, the thorax and cheeks are covered with pale yellow pubescence, having in parts a ferruginous stain; the legs beneath are of a dark rufo-testaceous colour; the femora compressed beneath, the posterior pair being broadly grooved longitudinally, and produced at the basal extremity into two sharp angular projections; the posterior tibiæ deeply notched beneath, and produced at their apex into a broad flattened tooth or spine; the anterior tarsi densely clothed with bright golden-yellow pubescence, the intermediate pair with ferruginous, and the posterior pair with black above, and with obscure ferruginous beneath. Abdomen: the basal segment covered with black pubescence, and the apex densely fringed with long blackish-brown pubescence; the apex rufo-piceous.

Hab. Silhet.

54. XYLOCOPA BASALIS. B.M.

Female. Length 6½–8 lines.—Black, the face densely covered with a short cinereous pubescence, the antennæ ferruginous; the face depressed in front of the posterior ocelli, forming a sharp transverse edge; a tubercle in front of the anterior ocellus. Thorax shining, the wings hyaline at their base to about one-third of their length, beyond which they are dark purple, the apical margins paler, the legs entirely black; the abdomen black, shining and closely punctured, the apex fringed with pale pubescence.

Male.—Closely resembling the female, but having a fulvous pubescence on the clypeus; a tuft of white pubescence before the wings, and another on each side of the basal segment of the abdomen; the posterior tibiæ slightly curved, the basal joint of the tibiæ incrassate, and having a tuft of white pubescence at the

apex, the joint compressed above; the abdomen fringed with white pubescence, that at the extreme apex fuscous.

Hab. Northern India.

55. XYLOCOPA AURIPENNIS. B.M.

Xylocopa auripennis, *St. Farg. Hym.* ii. 181. 10.

Hab. Bengal; China.

56. XYLOCOPA CHLOROPTERA.

Xylocopa chloroptera, *St. Farg. Hym.* ii. 207. 56 ♀.

Hab. China.

57. XYLOCOPA SINENSIS. B.M.

Female. Length 11 lines.—Black, the head closely and strongly punctured, the margins of the clypeus, and a central line, smooth and shining; the labrum has a tubercle in the centre; the flagellum, except the two basal joints, testaceous beneath; the margin of the vertex, the disk and sides of the thorax and the basal segment of the abdomen densely covered with bright yellow pubescence; the wings rufo-hyaline, their apical margins having a rufo-fuscous cloud, the nervures ferruginous; the tibiæ and tarsi clothed with bright rufo-fulvous pubescence. Abdomen very closely punctured, subopake, the apical margins of the segments very narrowly rufo-piceous; the sides of the abdomen fringed with black pubescence, at the extreme apex a little bright ferruginous pubescence.

Hab. China (Foo-chow-foo).

58. XYLOCOPA DISSIMILIS. B.M.

Xylocopa dissimilis, *St. Farg. Hym.* ii. 180. 9.
Xylocopa lunulata, *St. Farg. Hym.* ii. 184. 14, var. ♂.

Hab. China; Madras.

59. XYLOCOPA PICTIFRONS. B.M.

Xylocopa pictifrons, *Smith, Trans. Ent. Soc.* new ser. ii. 42.

Hab. North China.

60. XYLOCOPA RUFIPES. B.M.

Xylocopa rufipes, *Smith, Trans. Ent. Soc.* new ser. ii. 42.

Hab. North China.

61. XYLOCOPA CŒRULEA. B.M.

Bombus cœruleus, *Fabr. Syst. Piez.* p. 345. 9.
Xylocopa cœrulea, *St. Farg. Hym.* ii. 200. 46.
Hab. Java; East India.

62. XYLOCOPA DEJEANII. B.M.

Xylocopa (Schonnherria) Dejeanii, *St. Farg. Hym.* ii. 209. 59.
Hab. Java.

63. XYLOCOPA MARGINELLA.

Xylocopa marginella, *St. Farg. Hym.* ii. 205. 53.
Hab. Java.

64. XYLOCOPA MESOXANTHA. B.M.

Xylocopa mesoxantha, *St. Farg. Hym.* ii. 199. 45.
Hab. Java.

65. XYLOCOPA PHILIPPINENSIS. B.M.

Female. Length 12 lines.—Black, the pubescence entirely black, except that on the basal segment of the abdomen and on each side of the metathorax, which is yellow; the wings dark fuscous, having a purple iridescence.

Hab. Philippine Islands.

66. XYLOCOPA DIMIDIATA. B.M.

Xylocopa dimidiata, *St. Farg. Hym.* ii. 199. 44 ♀.

Hab. Isle of Timor; Australia (Cape Upstart; Port Essington; Macintyre River).

67. XYLOCOPA MUSCARIA.

Apis muscaria, *Fabr. Ent. Syst.* ii. 339. 105 ♂.
Oliv. Ency. Méth. iv. 77. 88.
Centris muscaria, *Fabr. Syst. Piez.* p. 358. 20, and *Cab. Mus. Dom. Banks.*
Lestis muscaria, *St. Farg. Hym.* ii. 211. 1 ♂.
Hab. New Holland.

68. XYLOCOPA SIMILLIMA. B.M.

Female. Length 10 lines.—Head and thorax black, a slightly

elevated carina passes forward from the anterior stemma and terminates opposite the insertion of the antennæ; the margins of the clypeus not raised; the labrum having a central quadrate tubercle. Thorax smooth and shining, having a beautiful violet iridescence; the metathorax sometimes having a ferruginous tinge; the wings dark fuscous, and having a violet iridescence; the legs entirely black. Abdomen: the three basal segments, sometimes the base of the fourth, red, their apical margins having a black band; sides of the abdomen having a fringe of black pubescence; the entire surface closely punctured beneath, the margins of the segments rufo-piceous.

Hab. Australia.

69. XYLOCOPA BRASILIANORUM. B.M.

Apis Brasilianorum, *Linn. Syst. Nat.* i. 961. 49 ♂.
Fabr. Ent. Syst. ii. 323. 40.
Xylocopa Brasilianorum, *Fabr. Syst. Piez.* p. 340. 11.
St. Farg. Hym. ii. 201. 47.

Hab. Brazil.

This insect is in all probability identical with the *X. teredo* of Guilding; there is nothing in the descriptions to separate them.

70. XYLOCOPA CARBONARIA. B.M.

Female. Length 8 lines.—Black, the head narrower than the thorax, closely and strongly punctured; the clypeus coarsely punctured, the margin raised posteriorly, and a little way on each side, not reaching the anterior margin; in the centre a narrow longitudinal smooth space, the labrum having three small tubercles. Thorax: the middle of the disk impunctate smooth and shining, beyond which it is strongly punctured, and densely clothed with short black pubescence; wings dark fuscous, and having a changeable violet iridescence; the legs entirely black. Abdomen very closely punctured, fringed at the sides with black pubescence, densely so towards the apex; beneath, strongly punctured and longitudinally subcarinate in the centre.

Hab. Brazil (Tapajos). (Coll. W. W. Bates.)

71. XYLOCOPA COLONA. B.M.

Xylocopa colona, *St. Farg. Hym.* ii. 185. 17.

Hab. Cayenne.

72. XYLOCOPA FRONTALIS. B.M.

Apis frontalis, *Oliv. Ency. Méth.* iv. 64. 6 ♀.
Xylocopa frontalis, *Fabr. Syst. Piez.* p. 340. 8.
St. Farg. & Serv. Ency. Méth. x. 793. 1.
St. Farg. Hym. ii. 175. 1.

Hab. Brazil; Cayenne.

73. XYLOCOPA FIMBRIATA. B.M.

Xylocopa fimbriata, *Fabr. Syst. Piez.* p. 340. 7.
St. Farg. Hym. ii. 177. 4.
Schomb. Faun. Flo. Brit. Guiana, iii. 591.
Xylocopa cornuta, *St. Farg. Hym.* ii. 176. 2, var. ♀.

Hab. Brazil; Cayenne.

74. XYLOCOPA FERVENS.

Xylocopa fervens, *St. Farg. Hym.* ii. 196. 39 ♀.

Hab. Brazil (Para). (Coll. F. Smith.)

75. XYLOCOPA FASCIATA. B.M.

Xylocopa fasciata, *St. Farg. Hym.* ii. 202. 48 ♂.

Hab. Brazil.

76. XYLOCOPA MACROPS.

Xylocopa (Schonnherria) macrops, *St. Farg. Hym.* ii. 209. 60 ♂.

Hab. Brazil.

77. XYLOCOPA MŒRENS.

Xylocopa? moerens, *Perty, Del. An. Art.* p. 150. t. 28. f. 11 ♀.

Hab. Brazil (Province of Minarum).

78. XYLOCOPA MORIO. B.M.

Apis morio, *Fabr. Ent. Syst.* ii. 315. 2.
Xylocopa morio, *Latr. Ins.* iii. 380.
Fabr. Syst. Piez. p. 338. 2.
Halid. Trans. Linn. Soc. xvii. 319. 12.

Hab. Brazil.

This is probably the female of *X. Brasilianorum*.

79. XYLOCOPA SPLENDIDULA.

Xylocopa splendidula, *St. Farg. Hym.* ii. 190. 29 ♀.
Hab. Brazil.

80. XYLOCOPA TEREDO.

Xylocopa teredo, *Guild. Trans. Linn. Soc.* xiv. 313. t. 8. f. 1 ♀, 5 ♂.
Westw. Nat. Libr. xxxviii. 268. t. 21. f. 1 ♂. 2 ♀.
Xylocopa Brasilianorum, *Fab.* ♂? X. morio, *Fab.* ♀?
Hab. Brazil.

81. XYLOCOPA VIRIDIS. B.M.

Male. Length 7 lines.—Green, the clypeus and sides of the face, the labrum, a line on the mandibles, the scape in front, and two or three of the basal segments of the flagellum in front, yellow; the face has a little pale pubescence intermixed with black hairs, the cheeks and margin of the vertex have a pale pubescence. Thorax shining, the middle of the disk sparingly punctured, thickly so on the sides, clothed with a pale fulvous pubescence; the wings subhyaline, the nervures and tegulæ ferruginous; the anterior legs beneath, and the joints of the intermediate and posterior pairs rufo-testaceous; the tarsi beneath have a fulvous pubescence; above, the legs have a mixed pubescence, pale fulvous on the anterior pair, the same on the intermediate tarsi, the posterior legs having some white on the posterior tarsi above, black within, and a mixture of fulvous beneath. Abdomen: the pubescence pale, thinly scattered, the apical segment having a black loose fringe; the apical margins of the segments narrowly bordered with white pubescence.
Hab. Brazil (Rio Tapajos).

82. XYLOCOPA XANTHOCNEMIS.

Xylocopa? xanthocnemis, *Perty, Del. An. Art.* p. 150. t. 28. f. 12 ♀.
Hab. Brazil.

83. XYLOCOPA AUGUSTI. B.M.

Xylocopa Augusti, *St. Farg. Hym.* ii. 187. 21.
Hab. Brazil.

84. XYLOCOPA ÆNEIPENNIS. B.M.

Apis æneipennis, *De Geer, Mem.* iii. 573. 5. t. 28. f. 8.
Xylocopa æneipennis, *St. Farg. Hym.* ii. 186. 20.
Schomb. Faun. Flo. Brit. Guiana, p. 591.
Hab. Brazil; Cayenne.

85. XYLOCOPA GROSSA. B.M.

Centris grossa, *Drury, Ill. Exot. Ent.* i. 102. t. 45. f. 3.
Apis purpurascens, *Fabr. Ent. Syst.* ii. 325. 50.
Apis iricolor, *Kirby, Mon. Ap. Angl.* ii. 310. 72. t. 17. f. 9.
Xylocopa purpurascens, *Fabr. Syst. Piez.* p. 341. 15.
Xylocopa iricolor, *St. Farg. Hym.* ii. 185. 16.

Hab. South America.

86. XYLOCOPA PULCHRA.

Female. Length 6½ lines.—Head and thorax black, the face has a little fuscous pubescence, the flagellum beneath fulvo-testaceous. Thorax: the pubescence above sooty-black, the wings subhyaline, having a fulvous tinge, the nervures ferruginous; the anterior legs black, the intermediate tarsi have a mixture of pale pubescence; the posterior tarsi have the basal half of the first joint clothed above with pale ochraceous pubescence. Abdomen green, shining and finely punctured, the basal segment has a little ochraceous pubescence on each side, the apical margin of the second and three following segments have a fascia of pale ochraceous pubescence, broadly interrupted in the middle; the sides thinly fringed with black hairs, the extreme apex ferruginous.

Hab. Rio. (Coll. F. Smith.)

87. XYLOCOPA AFFINIS.

Xylocopa (Schonnherria) affinis, *St. Farg. Hym.* ii. 210. 62.

Hab. Cayenne.

88. XYLOCOPA AURULENTA. B.M.

Bombus aurulentus, *Syst. Piez.* p. 351. 42.
Xylocopa aurulenta, *St. Farg. Hym.* ii. 192. 33.

Hab. South America (Cayenne).

89. XYLOCOPA BARBATA. B.M.

Xylocopa barbata, *Fabr. Syst. Piez.* p. 341. 14.

Hab. South America; Cayenne; Brazil.

90. XYLOCOPA CAJENNÆ. B.M.

Xylocopa Cajennæ, *St. Farg. Hym.* ii. 203. 50.

Hab. Cayenne.

91. XYLOCOPA NITENS.

Xylocopa nitens, *St. Farg. Hym.* ii. 176. 3.

Hab. Cayenne.

92. XYLOCOPA VIRIDIGASTRA.

Xylocopa viridigastra, *St. Farg. Hym.* ii. 186. 19.

Hab. Cayenne.

93. XYLOCOPA VIRESCENS.

Xylocopa virescens, *St. Farg. Hym.* ii. 186. 18.

Hab. Cayenne.

94. XYLOCOPA LATERALIS.

Xylocopa lateralis, *Say, Bost. Journ. Nat. Hist.* i. 413. 2.

Hab. Mexico.

95. XYLOCOPA TABANIFORMIS. B.M.

Female. Length 8 lines.—Black, the face has a thin griseous pubescence, that on the cheeks dense and hoary; the flagellum beneath, except the two basal joints, rufo-testaceous. Thorax smooth and shining on the disk, the centre of which is sparingly pubescent, on the sides and beneath it is dense and hoary; the legs have a similar pubescence, the scopa above slightly ochraceous, beneath black; the apical joints of the tarsi ferruginous. Abdomen, the basal segment has a griseous pubescence, the intermediate segments have on each side a white marginal fringe, the fifth segment has on its lateral margins a white fringe, and the sixth is fringed with black; the wings subhyaline, the nervures dark fuscous, the tegulæ ferruginous.

Hab. Mexico.

96. XYLOCOPA VIRGINICA. B.M.

Apis Virginica, *Drury, Ill. Exot. Ins.* i. t. 43. f. 1.
Linn. Mant. Plant. p. 540.
Fabr. Ent. Syst. ii. 318. 15.
Bombus Virginicus, *Fabr. Syst. Piez.* p. 346. 14.
St. Farg. Hym. i. 470. 17.
Xylocopa Virginica, *Westw. in Drury, Ill. Exot. Ins.* (1837) i. t. 43. f. 1.

Hab. Virginia.

97. XYLOCOPA CAROLINA. B.M.

Centris Carolina, *Fabr. Syst. Piez.* 357. 14.
Xylocopa Carolina, *Say, Bost. Journ. Nat. Hist.* i. 412. (Schonnherria), *St. Farg. Hym.* ii. 207. 57.

Hab. United States; St. John's Bluff, East Florida.

98. XYLOCOPA MICANS. B.M.

Xylocopa (Schonnherria) micans, *St. Farg. Hym.* ii. 208. 58 ♂.
Xylocopa vidua, *St. Farg. Hym.* ii. 210. 61 ♀ (*type in Coll. Westw.*).

Hab. N. America; St. John's Bluff, East Florida.

99. XYLOCOPA OBSCURA.

Xylocopa obscura, *St. Farg. Hym.* ii. 188. 25.

Hab. N. America?

100. XYLOCOPA PHALOTHORAX.

Xylocopa phalothorax, *St. Farg. Hym.* ii. 194. 37.

Hab. ——? (Coll. F. Smith.)

101. XYLOCOPA DIVISA. B.M.

Xylocopa divisa, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), p. 264.

Hab. ——?

Genus 54. LESTIS.

Apis, pt., *Fabr. Ent. Syst.* ii. 314 (1793).
Centris, pt., *Fabr. Syst. Piez.* p. 354 (1804).
Lestis, *St. Farg. Hym.* ii. 211 (1841).

Head transverse, as wide as the thorax; scape subfiliform, two-thirds of the length of the flagellum, the latter filiform; the ocelli placed in a triangle on the vertex. The labial palpi 4-jointed, shorter than the labium, about two-thirds of the length of the labium, which is very pubescent; the basal joint of the palpi elongate, thrice the length of the second joint, the two apical joints minute, placed continuous with the two basal ones. The maxillary palpi 4-jointed, gradually tapering from the base to the apex; the basal joint stout, about half the length of the second joint, the third shorter than the basal joint, the apical one slender, minute. The superior wings have one marginal and three submarginal cells; the marginal cell as long as the three submarginals, very narrow, and having a short abbreviated nervure at its apex; the second submarginal cell scarcely

half the width of the first, the third submarginal cell longer than the first, widest at its apex; the first recurrent nervure uniting with the second transverse nervure; the second recurrent nervure received by the third submarginal cell a little beyond the middle.

1. LESTIS BOMBYLANS. B.M.

Apis bombylans, *Fabr. Ent. Syst.* ii. 338. 104 ♀, and *Cab. Mus. Linn. Soc.*

Lestis bombylans, *Smith, Trans. Ent. Soc. Lond.* i. 1. new ser.

Hab. Australia.

The *Centris muscaria* of Fabricius is a *Xylocopa* ♂.

2. LESTIS ÆRATUS. B.M.

Lestis æratus, *Smith, Trans. Ent. Soc. Lond.* i. new series.

Hab. Australia; Hunter River; Van Diemen's Land.

Genus 55. EXOMALOPSIS.

Exomalopsis, *Spin. Mem. Accad. Torino*, xiii. 89 (1851).

Head as wide as the thorax, the ocelli placed in a line on the vertex. The labial palpi 4-jointed, the two basal joints elongate, the first twice the length of the second, the third and fourth minute, placed at the side and near the apex of the second joint. The maxillary palpi 6-jointed, the three basal joints of about equal length, the three apical joints gradually decreasing in length. The superior wings having one marginal and three submarginal cells, the second submarginal cell small, subquadrate; the first recurrent nervure uniting with the second transverse cubital nervure, the second recurrent nervure received near the apex of the third submarginal cell, which is narrowed towards the marginal cell. The posterior tibiæ furnished with a dense pollen-brush; the calcaria simple, the claws bifid. The abdomen globose.

1. EXOMALOPSIS AUROPILOSA. B.M.

Exomalopsis auropilosa, *Spin. Mem. Accad. Torino*, p. 89. 72.

Hab. Brazil (Para).

2. EXOMALOPSIS ANALIS.

Exomalopsis analis, *Spin. Mem. Accad. Torino*, xiii. 91. 73.

Hab. Para.

3. EXOMALOPSIS PILOSA. B.M.

Male. Length 3 lines.—Black, the face clothed with silvery white pubescence, the flagellum rufo-piceous, the mandibles ferruginous. Thorax clothed with pale pubescence; the wings subhyaline, the nervures and tegulæ pale rufo-testaceous; the legs rufo-piceous, the tarsi pale rufo-testaceous, clothed with long loose pale glittering pubescence. Abdomen ovate, rufo-piceous, clothed with a silvery pubescence; the second segment has on each side an oblique line of silvery pubescence, the third and following segments densely clothed with short silvery pubescence; beneath the margins fringed with long pale pubescence.

Hab. Brazil.

4. EXOMALOPSIS VILLIPES.

Female. Length 3½ lines.—Black; the face has a thin pale fulvous pubescence, the mandibles ferruginous, ciliated beneath with long hairs; the flagellum fulvo-testaceous beneath. Thorax above thinly clothed with pale fulvous pubescence; the legs rufo-piceous, the intermediate and posterior tarsi, as well as the posterior tibiæ, fulvous; the anterior and intermediate tarsi have a fulvous pubescence; the posterior legs have a dense scopa of long pubescence, that on the basal half of the tibiæ fulvous, the apical half sooty-black, beneath entirely fulvous. The wings subhyaline, the nervures pale testaceous. Abdomen ovate, smooth and shining, and beyond the second segment covered with a pale golden pubescence.

Hab. Brazil. (Coll. F. Smith.)

5. EXOMALOPSIS TESTACEA.

Female. Length 3 lines.—Head and thorax rufo-testaceous, the flagellum and labrum pale testaceous. Thorax: the wings clear hyaline, the nervures and tegulæ pale testaceous, the disk margined with yellowish-white pubescence; legs pale testaceous; the posterior legs have a dense yellowish-white scopa. Abdomen pale ferruginous, the second and third segments have on each side an oblique line of white pubescence, the sides and the apex fringed with white pubescence.

Hab. Brazil. (Coll. F. Smith.)

Genus 56. TETRAPEDIA.

Tetrapedia, *Klug, Berl. Mag.* iv. 33 (1810).
Ancyloscelis, *Latr. Fam. Nat.* p. 464 ? (1825).

1. TETRAPEDIA DIVERSIPES. B.M.

Tetrapedia diversipes, *Klug, Berl. Mag.* iv. 35. t. 1. f. 2.

Hab. Brazil.

2. TETRAPEDIA BICOLOR.

Female. Length 3 lines.—Head and thorax black, the anterior margin of the clypeus, the labrum and mandibles, the cheeks and antennæ ferruginous, the former obscurely so. Thorax: the wings testaceo-hyaline, the nervures pale testaceous, becoming darker towards the base of the wings; the legs dark rufo-piceous, the posterior pair densely clothed with black pubescence. Abdomen ferruginous, the apex having a thin black pubescence.

Hab. Brazil. (Coll. F. Smith.)

3. TETRAPEDIA ATRIPES.

Female. Length 5 lines.—Black, the flagellum piceous beneath; the mandibles have a testaceous spot near their apex; the thorax finely punctured, and thinly clothed with short black pubescence; the metathorax rounded, shining, and finely punctured; the legs have a black pubescence, the posterior tibiæ and tarsi densely clothed with long black pubescence.

Hab. Mexico. (Coll. F. Smith.)

4. TETRAPEDIA TESTACEA.

Female. Length 3 lines.—Testaceous, the labrum and mandibles pale yellow testaceous; the antennæ pale beneath. Thorax: two longitudinal pale yellow lines on the disk, an epaulet over the tegulæ yellow, the scutellum paler than the disk; wings subhyaline, the nervures testaceous; the legs pale testaceous: the posterior legs densely clothed with golden-yellow pubescence.

Hab. Brazil (Para). (Coll. F. Smith.)

5. TETRAPEDIA NASUTA.

Male. Length 3 lines.—Head and thorax black, the clypeus anteriorly, the labrum, mandibles, and scape in front, yellowish-white, the flagellum rufo-testaceous beneath, the inner orbits of the eyes white. Thorax: the disk has two obscure pale lines; the wings testaceo-hyaline, the nervures pale testaceous; the thorax beneath testaceous, the legs testaceous; the intermediate and posterior tibiæ darkest, clothed with black pubescence. Abdomen fulvo-testaceous, the margins of the segments darkest.

Hab. Brazil. (Coll. F. Smith.)

Genus 57. ANCYLOSCELIS.

Ancyloscelis, *Latr. Fam. Nat.* p. 463 (1825).
Tetrapedia, *Klug, Berl. Mag.* p. 33? (1810).

1. ANCYLOSCELIS URSINUS.

Ancyloscelis ursinus, *Hal. Trans. Linn. Soc.* xvii. 320. 16.
Hab. Brazil (St. Paul's). (Coll. W. W. Saunders, Esq.)

2. ANCYLOSCELIS ORNATUS.

Ancyloscelis ornata, *Spin. Mem. Accad. Torino*, xiii. 87. 69 (1851).
Hab. Brazil (Para).

3. ANCYLOSCELIS ARMATUS.

Male. Length 2¼ lines.—Black, the face has a thin ochraceous pubescence, the antennæ rufo-piceous beneath, the scape ferruginous; the anterior margin of the clypeus, the labrum and mandibles pale testaceous, the latter ferruginous at their tips. Thorax: the pubescence on the disk ochraceous, on the sides and beneath it is cinereous; the tegulæ and costal nervure rufo-testaceous; wings hyaline, the nervures black; the posterior coxæ and femora incrassate, the latter flattened beneath, and having a raised carina or margin on each side; the tibiæ incrassate, less so than the femora; the tarsi and the apex and extreme base of the tibiæ ferruginous; the posterior tarsi have a stout curved tooth at their base beneath. Abdomen subovate, the apical margins of the segments having a fascia of white pubescence.
Hab. Brazil. (Coll. F. Smith.)

4. ANCYLOSCELIS LINEATUS.

Ancyloscelis lineata, *Spin. Mem. Accad. Torino*, xiii. 87. 70 (1851).
Hab. Para.

5. ANCYLOSCELIS NIGRIPES.

Ancyloscelis nigripes, *Spin. Mem. Accad. Torino*, xiii. 88. 71 (1851).
Hab. Para.

Genus 58. EPICHARIS.

Apis, pt., *Oliv. Ency. Méth.* iii. (1792).
Centris, pt., *Fabr. Syst. Piez.* p. 354 (1804).
Epicharis, *Klug, Illig. Mag.* vi. (1807).

1. EPICHARIS RUSTICA. B.M.

Apis rustica, *Oliv. Ency. Méth.* iii. 8 ♀.
Apis hirtipes, *Fabr. Ent. Syst.* ii. 325. 49.
Centris hirtipes, *Fabr. Syst. Piez.* p. 355. 4.
Epicharis dasypus, *Klug, Illig. Mag.* vi. 226.
Blanch. Hist. nat. des Ins. iii. 405.
Schomb. Faun. Flo. Brit. Guiana, p. 591.
Epicharis rustica, *St. Farg. Hym.* ii. 170. 1, *and type sp. in Coll. Westw.*

Hab. Cayenne; Brazil.

2. EPICHARIS DEJEANII. B.M.

Epicharis Dejeanii, *St. Farg. Hym.* ii. 171. 2 ♀, *and type sp. in Coll. Westw.*
Epicharis fasciata, *St. Farg. Hym.* ii. 172. 4 ♂, *and type sp. in Coll. Westw.*

Hab. Brazil; Cayenne.

3. EPICHARIS ANALIS.

Epicharis analis, *St. Farg. Hym.* ii. 173. 5.

Hab. Brazil?

4. EPICHARIS UMBRACULATA. B.M.

Centris umbraculata, *Fabr. Syst. Piez.* 355. 5.
Epicharis umbraculata, *Klug, Illig. Mag.* vi. 226.
Epicharis Cajennæ, *St. Farg. Hym.* ii. 172. 3, *and type sp. in Coll. Westw.*

Hab. Brazil (Santarem); Cayenne.

5. EPICHARIS BICOLOR. B.M.

Male. Length 8 lines.—Black, a triangular spot at the anterior angles of the face, the scape in front and the labrum yellow; a pale yellow testaceous spot near the apex of the mandibles, sometimes two minute yellow spots at the base of the clypeus; thorax clothed above with dark cinereous pubescence, that on the sides, beneath, on the femora, anterior and intermediate tibiæ, black; the posterior tibiæ and basal joint of the tarsi above yellow, beneath they are black, as well as the apical joints of the tarsi, the claws ferruginous, their tips black; the wings fuscous, the tegulæ having an obscure yellow spot on each side. Abdomen orange-yellow, the margins of the segments pale rufo-testaceous.

Hab. Brazil.

6. EPICHARIS ZONATA.

Male. Length 9 lines.—Head and thorax black, the scape in front, the face below the insertion of the antennæ white, the labrum white; a triangular black spot on each side of the clypeus; the pubescence on the cheeks white; that on the vertex, and that on the disk of the thorax of a griseo-fuscous mixture, at the sides of the metathorax it is whitish, that on the breast black; the posterior margin of the scutellum deeply emarginate; the wings fusco-hyaline; the legs have a fuscous pubescence beneath, the intermediate and posterior tibiæ and tarsi fringed behind with long pale yellow pubescence, the apical joints of the tarsi pale testaceous; the claws, and also the calcaria ferruginous, the latter serrated on their inner margins. Abdomen yellow, the apical margins of the segments have a narrow fusco-ferruginous band.

Hab. Brazil.

Genus 59. CENTRIS.

Apis, pt., *Fabr. Ent. Syst.* ii. 314 (1793).
Centris, pt., *Fabr. Syst. Piez.* p. 354 (1804).
Trachina, *Klug, Illig. Mag.* vi. (1807).
Hemisia, *Klug, Illig. Mag.* vi. (1807).

1. CENTRIS HÆMORRHOIDALIS. B.M.

Apis hæmorrhoidalis, *Fabr. Ent. Syst.* ii. 339. 106 ♀.
Centris hæmorrhoidalis, *Fabr. Syst. Piez.* p. 359. 23.
Centris tabaniformis, *Fabr. Syst. Piez.* p. 358. 21 ♂.
Hemisia hæmorrhoidalis et tabaniformis, *Klug, Illig. Mag.* vi. 227.

Hab. Brazil; St. Domingo.

2. CENTRIS FLAVIFRONS. B.M.

Apis flavifrons, *Fabr. Ent. Syst.* ii. 329. 66 ♀.
Anthophora flavifrons, *Fabr. Syst. Piez.* p. 375. 15.
Centris flavifrons, *St. Farg. Hym.* ii. 152. 6, *and type sp. in Coll. Westw.*

Male. Length 8 lines.—This sex closely resembles the female, but differs in having the face below the insertion of the antennæ and the mandibles yellow, the latter black at their tips; the clypeus has on each side a large black lunate spot; the anterior and intermediate tibiæ have a yellow stripe above.

Hab. Brazil.

3. CENTRIS LANGSDORFII. B.M.

Centris Langsdorfii, *St. Farg. MSS.* (*Blanch.*) *Hist. nat. des Ins.* iii. 1. 405. t. 7. f. 7 ♀.

The male of this species closely resembles the female, the pubescence of the thorax being of a deeper fulvous tint, the scape in front, the clypeus and labrum being pale testaceous.

Hab. Brazil.

4. CENTRIS ÆNEA.

Centris ænea, *St. Farg. Hym.* ii. 163. 26 ♀.

Hab. Brazil. (Coll. J. S. Baly, Esq.)

5. CENTRIS BICOLOR.

Centris bicolor, *St. Farg. Hym.* ii. 163. 25 ♀.

Hab. Brazil.

6. CENTRIS BIMACULATA.

Centris bimaculata, *St. Farg. Hym.* ii. 168. 36 ♀.

Hab. Brazil.

7. CENTRIS COLLARIS.

Centris collaris, *St. Farg. Hym.* ii. 162. 24 ♀.

Hab. Brazil (St. Paul's).

8. CENTRIS CHRYSITIS.

Centris chrysitis, *St. Farg. Hym.* ii. 162. 23 ♀.

Hab. Brazil (St. Paul's).

9. CENTRIS FERRUGINEA.

Centris ferruginea, *St. Farg. Hym.* ii. 156. 12 ♀, *and type sp. in Coll. Westw.*

Centris longimana, *Fabr. Syst. Piez.* 356. 6 ♂?

Hab. Brazil.

10. CENTRIS FUSCATA.

Centris fuscata, *St. Farg. Hym.* ii. 167. 34 ♂.

Hab. Brazil (St. Paul's).

11. CENTRIS FURCATA.

Bombus furcatus, *Fabr. Syst. Piez.* p. 350. 41 ♀.
Centris furcata, *St. Farg. Hym.* ii. 151. 3, *and type sp. in Coll. Westw.*
Blanch. Hist. nat. des Ins. iii. 405. 1. t. 7. f. 6.

Hab. Brazil.

12. CENTRIS NITENS.

Centris nitens, *St. Farg. Hym.* ii. 163. 27.

Hab. Brazil.

13. CENTRIS PUNCTATA.

Centris punctata, *St. Farg. Hym.* ii. 169. 37 ♀ (nec *Fabr.*).

Hab. Brazil.

14. CENTRIS PULVERATA.

Centris pulverata, *St. Farg. Hym.* ii. 161. 22 ♀.

Hab. Brazil (St. Paul's).

15. CENTRIS RUFA. B.M.

Centris rufa, *St. Farg. Hym.* ii. 153. 8 ♀, *and type sp. in Coll. Westw.*

Hab. Brazil.

16. CENTRIS THORACICA.

Centris thoracica, *St. Farg. Hym.* ii. 158. 16 ♀.

Hab. Brazil.

17. CENTRIS VITTA.

Centris vitta, *St. Farg. Hym.* ii. 168. 35 ♂ ♀.

Hab. Brazil.

18. CENTRIS VIOLACEA.

Centris violacea, *St. Farg. Hym.* ii. 151. 4 ♀ (*type sp. in Coll. Westw.*).

Hab. Brazil.

19. CENTRIS MODESTA. B.M.

Male. Length 9 lines.—Black, the apex of the mandibles pale yellow testaceous, the thorax densely clothed above with

dark brown pubescence, palest on the posterior margin of the scutellum; the wings dark fuscous, having a slight violet iridescence; the legs black. Abdomen, the two basal segments have a black pubescence, that on the following segments being of a pale reddish-brown.

Hab. Brazil.

20. CENTRIS MACULIFRONS. B.M.

Female. Length 7 lines.—Head and thorax black; the clypeus has a broad transverse stripe anteriorly, united to a perpendicular one yellow; the face on each side of the clypeus, the labrum and mandibles yellow, the latter black at their tips, the anterior margin of the clypeus black; the face has a little pale pubescence at the insertion of the antennæ and at the sides of the face; that on the disk of the thorax anteriorly fuscous, posteriorly pale yellow, the collar, sides and thorax beneath pale yellow; the legs dark rufo-testaceous; the anterior tibiæ fringed behind with a thin pale pubescence, that on the tarsi brown; the intermediate and posterior legs have a black pubescence. Abdomen metallic green, the basal segment clothed with pale pubescence; the apical margin of the third segment, the fourth and fifth have a pale golden pubescence, the sixth segment fringed with bright golden hairs.

Hab. Brazil.

21. CENTRIS DECORATA. B.M.

Male. Length 11 lines.—Black, the clypeus and labrum pale testaceous, their margins more or less fuscous; the disk of the thorax clothed with short black pubescence, encircled with bright yellow; this colour also adorns the metathorax, the sides of the thorax and the breast; the wings nearly black, and having a violet iridescence; the legs black. Abdomen: the base has on each side a little pale yellow pubescence, the second, third and fourth segments clothed with olive-green pubescence; their basal and apical margins have a narrow border of black, the apical segment fringed with long black pubescence.

Hab. Brazil.

22. CENTRIS RUBELLA.

Female. Length 8 lines.—Head and thorax black; the face has a little white pubescence on each side, a tuft between the ocelli, and the cheeks densely clothed with white; the labrum has a bright golden pubescence, the clypeus has a large testaceous

spot on each side, and the mandibles a similar spot near their apex. Thorax: the disk covered with very short black pubescence, a little pale pubescence on each side of the collar, a tuft behind the wings; the metathorax has laterally a little fuscous pubescence; the legs rufo-testaceous, the anterior and intermediate pairs fuscous above, their tarsi densely clothed with rufous pubescence; the scopa on the posterior legs bright fulvo-ochraceous above, beneath having a ferruginous stain; wings dark fuscous, with a purple iridescence. Abdomen ferruginous.

Hab. Brazil (Rio Tapajos).

23. CENTRIS PLUMIPES. B.M.

Female. Length 9 lines.—Black, the head and thorax black, the former having a purple or æneous tinge on the face and vertex; the clypeus on each side, as well as the anterior angles of the face, the labrum and mandibles pale testaceous; the cheeks densely clothed with cinereous pubescence; there is also a little short cinereous pubescence between the antennæ. Thorax: the middle of the disk has an æneous tinge, densely clothed above and at the sides with a short black pubescence, beneath it is pale bright ochraceous; the legs have more or less of an æneous tinge above; the anterior and intermediate legs, above, have their pubescence black, that on the tarsi beneath reddish-brown; the posterior tibiæ and tarsi pale rufo-testaceous, densely clothed exteriorly with long pale ochraceous pubescence, the hairs beautifully pectinated or plumose; the wings dark fuscous, beautifully tinged with a purple iridescence. Abdomen olive-green at the base, gradually becoming coppery towards the apex.

The male only differs in having the clypeus and labrum entirely pale testaceous, the former having a broad spathuliform black mark in the middle.

Hab. Brazil (Santarem).

24. CENTRIS FLAVOPICTA. B.M.

Male. Length 10 lines.—Head and thorax black, the latter as well as the cheeks covered with cinereous pubescence; the scape in front, the anterior margin of the clypeus and a perpendicular line uniting with it, a transverse line above it, the sides of the face, the labrum and mandibles yellow, the latter ferruginous at their tips; the legs yellow, the femora black at their base, and the tibiæ having a black spot above; the pubescence on the legs fulvous; the wings smoky, towards their apical margins subhyaline. Abdomen yellow, the margins of the segments rufo-piceous, having more or less of a metallic tinge; the apex

thinly covered with fulvous pubescence, beneath thickly covered with pale fulvous pubescence.

Hab. Brazil (Ega).

25. CENTRIS DIFFORMIS. B.M.

Female. Length 9 lines.—Head and thorax black, the flagellum beyond the third joint fulvous beneath; the clypeus short, transverse and elevated, its anterior portion vertical, having a transverse pale testaceous depression; the labrum pale testaceous, having two longitudinal fuscous stripes; the mandibles large, very broad at their base, and armed above with a stout tooth, their apex bidentate, having a longitudinal pale testaceous stripe; the cheeks densely clothed with white pubescence; between the antennæ and on each side of the face below their insertion, a little white pubescence, that on the vertex black. Thorax clothed with fuscous pubescence at the sides, beneath it is cinereous; the legs dark rufo-testaceous, the posterior pair ferruginous; the tibiæ and basal joint of the tarsi densely clothed exteriorly with bright fulvous pubescence; the anterior and intermediate tarsi have a fulvous pubescence; the wings smoky. Abdomen ferruginous, the base having a little cinereous pubescence, that at the apex ferruginous.

Hab. Brazil (Rio Tapajos).

26. CENTRIS DENTATA.

Male. Length 7½ lines.—Black, the scape, clypeus, labrum and mandibles yellow, at the base of the clypeus two abbreviated black stripes; the flagellum rufo-testaceous beneath; the cheeks densely clothed with pale pubescence, that on the vertex fulvous. Thorax clothed with fulvous pubescence, palest on the metathorax; the wings subhyaline, the tegulæ pale testaceous; the legs rufo-testaceous, the posterior pair much darker than the others, their femora incrassate, and armed in the middle beneath with a short stout curved spine; the tibiæ and basal joint of the posterior tarsi densely fringed with black pubescence. Abdomen, the base and the apical segments clothed with fulvous pubescence.

Hab. Brazil (Rio Tapajos).

27. CENTRIS SPONSA.

Female. Length 11 lines.—Black, the collar has a broad band of short ochraceous velvety pubescence, which is continued down the sides, not beneath; the metathorax has a mixture of ochreous pubescence; the wings dark fuscous, opake, and having a metallic-green iridescence; legs black. Abdomen, the first

and second segments densely clothed with a short velvety ochraceous pubescence, inclining to an olive-yellow; the apical margin of the basal segment, and the basal margin of the second, narrowly black.

Hab. Columbia.

This is probably the female of *C. decorata*.

28. CENTRIS INSIGNIS.

Female. Length 11 lines. — Black, the head ferruginous, the front above the insertion of the antennæ testaceous, the scape and two basal joints of the flagellum ferruginous; the apical half of the mandibles black; the pubescence on the head, thorax and legs fulvous; the wings dark fuscous, and having a violet iridescence; the legs ferruginous. Abdomen, the second segment densely clothed with very short pale yellow pubescence; a patch of the same at the extreme lateral margins of the third segment.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

29. CENTRIS FESTIVA.

Female. Length 9 lines.—Head and thorax black, a tuft of pale pubescence between the antennæ, and a pale testaceous spot on the mandibles near their apex. Thorax densely clothed with short dark olive pubescence, the wings rather dark fusco-hyaline; the posterior legs have dense scopæ of long fulvo-ochraceous pubescence. Abdomen of a rather obscure metallic-green; the base has a little short cinereous pubescence; the margin of the second segment narrowly and the third more broadly testaceous, the former having a pale and the latter a bright fulvous pubescence; the fourth and fifth have a pale pubescence intermixed with black hairs; the apical segment fringed with bright ferruginous hairs; the sixth segment ferruginous.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

30. CENTRIS AMERICANORUM.

Ptilotopus Americanorum, *Klug, Mag. Berlin*, 1810, p. 32. t. 1. f. 1.
Centris Americanorum, *St. Farg. Hym.* ii. 156. 13 (nec *Bombus Americanorum*, Fabr.).

Hab. Cayenne.

31. CENTRIS BOMBYFORMIS.

Hemisia bombyformis, *Spin. Ann. Soc. Ent. Fr.* x. 148. 100 ♀ (1841).

Hab. Cayenne.

32. CENTRIS CLYPEATA.

Centris derasa, *St. Farg. Hym.* ii. 150. 2 ♀ (*and type sp. in Coll. Westw.*).
Centris clypeata, *St. Farg. Hym.* ii. 157. 14 ♂.
Guér. Icon. Règ. Anim. Ins. p. 455. t. 74. 6.
Centris emarginata, *St. Farg. Hym.* ii. 157. 15. var. ♀?

Hab. Cayenne.

33. CENTRIS DENUDANS. B.M.

Centris denudans, *St. Farg. Hym.* ii. 150. 1 ♀ (*and type sp. in Coll. Westw.*).
Trachina denudans, *Schomb. Faun. Flo. Brit. Guiana*, 591.

Hab. Cayenne; Brazil (Rio Tapajos).

34. CENTRIS EMARGINATA. B.M.

Centris emarginata, *St. Farg. Hym.* ii. 157. 15 ♀.

Hab. Cayenne.

35. CENTRIS LANIPES.

Apis lanipes, *Fabr. Ent. Syst.* ii. 340. 113 ♀.
Centris lanipes, *Fabr. Syst. Piez.* p. 360. 29.
St. Farg. Hym. ii. 165. 29 (*sp. in Coll. Westw.*).
Hemisia lanipes, *Klug, Illig. Mag.* vi. 227.

Hab. Cayenne; Brazil.

36. CENTRIS LONGIMANA.

Centris longimana, *Fabr. Syst. Piez.* p. 356. 6.
St. Farg. Hym. ii. 164. 28.
Trachina longimana, *Klug, Illig. Mag.* vi. 226.

Hab. Cayenne.

37. CENTRIS LATICINCTA.

Hemisia laticincta, *Spin. Ann. Soc. Ent. Fr.* x. 148. 98 ♀ (1841).

Hab. Cayenne.

38. CENTRIS LINEOLATA. B.M.

Centris lineolata, *St. Farg. Hym.* ii. 158. 17 ♀.
Trachina lineolata, *Klug, Illig. Mag.* vi. 183.

Hab. Cayenne.

39. CENTRIS NIGRESCENS.

Centris nigrescens, *St. Farg. Hym.* ii. 166. 32 ♂.

Hab. Cayenne.

40. CENTRIS OBSOLETA. B.M.

Centris obsoleta, *St. Farg. Hym.* ii. 153. 7 ♀ (*and type sp. in Coll. Westw.*).

The male has the thorax irregularly garnished with lines of pale yellow pubescence.

Hab. Cayenne; Brazil (Rio Tapajos and the Amazons).

41. CENTRIS PYROPYGA.

Hemisia pyropyga, *Spin. Ann. Soc. Ent. Fr.* x. 148. 99 ♀ (1841).

Hab. Cayenne.

42. CENTRIS SCAPULATA.

Centris scapulata, *St. Farg. Hym.* ii. 159. 18 ♀.

Hab. Cayenne; Columbia. (Coll. W. W. Saunders, Esq.)

43. CENTRIS PŒCILA.

Centris pœcila, *St. Farg. Hym.* ii. 154. 10 ♀ (*type sp. in Coll. Westw.*).

Hab. Havannah.

44. CENTRIS FASCIATA. B.M.

Female. Length 7 lines.—Head and thorax black; the clypeus has a somewhat curved transverse fascia, from the middle of which a line terminating in a point passes upwards to the base; the face on each side, the labrum and mandibles yellow, the latter black at their tips; the scape yellow in front, the flagellum, except the two basal joints, testaceous beneath. Thorax clothed above with fulvo-ochraceous pubescence, paler on the metathorax and beneath; legs rufo-testaceous; tibiæ and tarsi clothed above with fulvo-ochraceous pubescence, that on the tarsi brightest; wings hyaline and iridescent; the basal segment of the abdomen of a metallic green, the following segments yellow, their apical margins having a fascia of a rufo-testaceous colour, having a metallic green tinge; beneath reddish-yellow, the third and fourth segments having a transverse fuscous stain.

Male.—Rather smaller, but closely resembling the female, differing only in having the yellow of a brighter colour on the

face, the clypeus having merely a dark line on each side; the scutellum pale testaceous; the anterior femora in front, towards their apex, and the tibiæ above having a yellow line; the intermediate and posterior tibiæ have a spot at their base, and the femora a yellow spot near their apex beneath; otherwise as in the other sex.

Hab. Jamaica.

45. CENTRIS EPHIPPIUM. B.M.

Male. Length 9 lines.—Black, the labrum and clypeus pale yellow testaceous, the margins of the latter fuscous; the labrum densely clothed with a short pale woolly pubescence; the mandibles have a pale testaceous spot near their apex. Thorax: the disk behind the insertion of the wings densely clothed with short ochraceous pubescence, the scutellum clothed with the same; the sides of the metathorax, the thorax beneath, the legs and abdomen, entirely black.

Hab. Venezuela.

46. CENTRIS CINERARIA. B.M.

Female. Length 7 lines.—Head and thorax black, the thorax clothed above with short white pubescence, on the sides and beneath it is black; the legs have also a black pubescence; the wings subhyaline, their nervures black. Abdomen blue-black, fringed at the sides and apex with black hairs.

Hab. Chili.

47. CENTRIS MEXICANA.

Female. Length 7 lines.—Black, the three basal joints of the antennæ rufo-testaceous, the thorax densely clothed with ochraceous pubescence; wings fuscous, palest towards their margins; the legs have a black pubescence, that on the posterior pair very long and dense. Abdomen, the basal segment covered with pale ochraceous pubescence; the apex fringed with black.

Hab. Mexico.

48. CENTRIS ATERRIMA. B.M.

Male. Length 8 lines.—Entirely black, the pubescence of a sooty-black; the labrum rugose. Thorax: the wings dark fuscous, paler towards their apical margins. Abdomen shining, delicately reticulated, and sparingly covered with pubescence; at the sides and at the apex it is more dense.

Hab. Mexico.

49. CENTRIS VERSICOLOR. B.M.

Apis versicolor, *Fabr. Ent. Syst.* ii. 340. 111 ♀.
Centris versicolor, *Fabr. Syst. Piez.* p. 359. 25.
St. Farg. Hym. ii. 154. 9 (*sp. in Coll. Westw.*).
Centris tabaniformis, *Fabr. Syst. Piez.* p. 358. 21 ♂.
Hemisia versicolor, *Klug, Illig. Mag.* vi. 227.
Centris decolorata, *St. Farg. Hym.* ii. 160. 19 ♂ (*type sp. in Coll. Westw.*).

Hab. South America.

50. CENTRIS TESTACEA.

Centris testacea, *St. Farg. Hym.* ii. 165. 30 ♀.

Hab. South America.

51. CENTRIS TRIGONOIDES.

Centris trigonoides, *St. Farg. Hym.* ii. 167. 33 ♂.

Hab. South America.

52. CENTRIS PICEA. B.M.

Centris picea, *St. Farg. Hym.* ii. 166. 31 ♀.

Hab. S. America (Napo).

53. CENTRIS MACULATA.

Centris maculata, *St. Farg. Hym.* ii. 160. 20 ♀ (*type sp. in Coll. Westw.*).

Very closely allied to *C. versicolor*, if not indeed a variety, the only difference being in the maculation of the face.

Hab. South America.

54. CENTRIS DORSATA.

Centris dorsata, *St. Farg. Hym.* ii. 161. 21 ♀.

Hab. South America.

55. CENTRIS ANALIS.

Centris analis, *St. Farg. Hym.* ii. 152. 5 ♀.
Centris nobilis, *Westw. Nat. Libr.* xxxviii. 263. t. 20. f. 1.

Hab. S. America.

56. CENTRIS CHILIENSIS.

Hemisia chiliensis, *Spin. Faun. Chil.* vi. 167. 1.

Female. Length 6 lines.—Black; abdomen above smooth and shining, the disk of the thorax densely clothed with yellowish-white pubescence; wings hyaline, the nervures obscure.

Hab. Chili.

57. CENTRIS NIGERRIMA.

Hemisia nigerrima, *Spin. Faun. Chil.* vi. 167. 2.

Female. Length 6 lines.—Closely resembling *H. chiliensis*, but the pubescence of the thorax and abdomen is black.

Hab. Chili.

Genus 60. EUGLOSSA.

Apis, pt., *Linn. Syst. Nat.* i. 953.
Euglossa, *Latr. Hist. nat. des Cr. et Ins.* iii. 384 (1802).
Eulema (and Euglossa), *St. Farg. Hym.* ii. 11 (1841).

1. EUGLOSSA DIMIDIATA. B.M.

Apis dimidiata, *Fabr. Ent. Syst.* ii. 316. 6.
Centris dimidiata, *Fabr. Syst. Piez.* p. 354. 1.
Schomb. Faun. Flo. Brit. Guiana, p. 519.
Euglossa dimidiata, *Perty, Del. An. Art.* p. 151. t. 28. f. 14 ♀.
Eulema dimidiata, *St. Farg. Hym.* ii. 12. 2.

Hab. Brazil; Cayenne.

2. EUGLOSSA CORDATA. B.M.

Apis cordata, *Linn. Syst. Nat.* i. 955. 15.
De Geer, Ins. iii. t. 28. f. 5.
Fabr. Ent. Syst. ii. 339. 109.
Euglossa cordata, *Latr. Hist. nat. Crust. et Ins.* iii. 384.
Fabr. Syst. Piez. p. 363. 3.
St. Farg. Hym. ii. 9. 1.
Schomb. Faun. Brit. Guiana, p. 592.
Cnemidium viride, *Perty, Del. An. Art.* p. 149. t. 28. f. 9 ♂.

Hab. Brazil (Para); Cayenne.

3. EUGLOSSA ANALIS. B.M.

Euglossa analis, *Westw. Nat. Lib.* xxxviii. p. 262. pl. 19. f. 2.

Hab. Brazil (Santarem).

4. Éúglossa piliventris. B.M.

Euglossa piliventris, *Guér. Icon. Règ. Anim.* p. 458. 4 ♂ & ♀.
Hab. Para.

5. Euglossa Romandii. B.M.

Euglossa Romandii, *Guér. Icon. Règ. Anim.* p. 458. 5.
Hab. Brazil.

6. Euglossa pallax. B.M.

Female. Length 9 lines.—Black, the head and thorax clothed with short black pubescence; the clypeus has a central raised sharp carina, which passes also down the middle of the labrum; the latter has another carina on each side; the posterior tibiæ compressed and broadly dilated. Abdomen densely clothed with short fulvo-ochraceous pubescence, palest towards the apex.

Male. Length 9 lines.—Black, the head and thorax having a vivid golden-green effulgence; the clypeus has a central raised carina; the thorax has a short black pubescence; the wings subhyaline, smoky towards their base; the legs have more or less of a blue or coppery effulgence; the posterior tibiæ broadly dilated, convex exteriorly, flat within.

Hab. Brazil (Para).

7. Euglossa pulchra. B.M.

Female. Length 8 lines.—Head of a brilliant golden-green, the margins of the clypeus slightly raised at the sides anteriorly, and having a smooth impunctate line down the centre; the antennæ black; the thorax and two basal segments of the abdomen of a beautiful purple, smooth and shining; the thorax anteriorly clothed with short black pubescence; the legs black, the posterior tibiæ broadly dilated and concave exteriorly, the basal joint of the tarsi also dilated; the wings fuscous. Abdomen, the four apical segments green, and having a short changeable golden pile.

Hab. Brazil (Tapajos).

8. Euglossa violacea. B.M.

Euglossa violacea, *Blanch. Hist. nat. Ins.* iii. 405 ♀.
Euglossa cærulescens, *St. Farg. Hym.* ii. 11. 3 ♂.

The female of this species is entirely purple, the pubescence on the thorax being black.

Hab. Brazil.

9. Euglossa nigrita. B.M.

Eulema analis, *St. Farg. Hym.* ii. 14. 7 ♂, nec *Westw.*
Eulema nigrita, *St. Farg. Hym.* ii. 14. 6 ♀.

Hab. Cayenne; Brazil.

10. Euglossa Brullei.

Euglossa Brullei, *St. Farg. Hym.* ii. 10. 2.

Hab. Brazil?

11. Euglossa Surinamensis. B.M.

Apis Surinamensis, *Linn. Syst. Nat.* i. 961. 52.
Drury, Illus. Exot. Ins. iii. t. 43. f. 4.
De Geer, iii. t. 43. f. 4.
Fabr. Ent. Syst. ii. 326. 53.
Apis mussitans, *Fabr. Ent. Syst.* ii. 326. 53.
Centris Surinamensis, *Fabr. Syst. Piez.* p. 355. 3.
Schomb. Faun. Flo. Brit. Guiana, p. 592.
Eulema Surinamensis, *St. Farg. Hym.* ii. 13. 4 (*type sp. in Coll. Westw.*).
Euglossa Surinamensis, *Westw. Nat. Lib.* xxxviii. 261. t. 19. f. 1.
Schomb. Faun. Flo. Brit. Guiana, p. 592.

Hab. Brazil; Columbia; British Guiana.

12. Euglossa smaragdina.

Centris smaragdina, *Perty, Del. An. Art.* p. 150. t. 28. f. 13.

Hab. Brazil.

13. Euglossa elegans. B.M.

Eulema elegans, *St. Farg. Hym.* ii. 13. 3 (*type sp. in Coll. Westw.*).

Hab. Cayenne; Brazil.

14. Euglossa Cajennensis. B.M.

Eulema Cajennensis, *St. Farg. Hym.* ii. 14. 5.
Eulema fasciata, *St. Farg. Hym.* ii. 12. 1 ♀ (*type sp. in Coll. Westw.*).

Hab. Cayenne; Honduras; Brazil.

Subfam. 5. SOCIALES, *Latr.*

Genus 61. APATHUS.

Apis, pt., *Fabr. Ent. Syst.* ii. 314 (1793).
Bombus, pt., *Fabr. Syst. Piez.* p. 342 (1804).
Bremus, pt., *Jurine, Hym.* p. 275 (1807).
Psithyrus, *St. Farg. Ann. Soc. Ent. Fr.* (nec *Hubner*) 1832.
Apathus, *Newm. Ent. Mag.* ii. (1834).

1. APATHUS RUPESTRIS. B.M.

Apis rupestris, *Fabr. Ent. Syst.* ii. 320. 26 ♀.
Kirby, Mon. Ap. Angl. ii. 369. 108 ♀.
Apis Albinella, *Kirby, Mon. Ap. Angl.* ii. 361. 104 ♂.
Apis frutetorum, *Panz. Faun. Germ.* 75. 20 ♂.
Fabr. Syst. Piez. 350. 38.
Bremus pomorum, *Panz. Faun. Germ.* 75. 18 ♂.
Apis subinterrupta, *Kirby, Mon. Ap. Angl.* ii. 356. 99 ♂, and *Cab. Mus. Ent. Soc.*
Bombus rupestris, *Fabr. Syst. Piez.* 348. 26.
Latr. Hist. Nat. xiv. 64. 3.
Dahlb. Bomb. Scand. 51. 33.
Psithyrus rupestris, *St. Farg. Hym.* ii. 426. 1.
Drews. & Schiödte, Kröy. Tidsskr. ii. 125. 5.
Curtis, Brit. Ent. x. t. 468.
Nyland. Ap. Boreal. p. 241. 1.
Psithyrus frutetorum, *St. Farg. Hym.* ii. 436. 5 ♂.
Apathus rupestris, *Smith, Zool.* ii. 543. 1; *Cat. Acul. Hym.* 97. 1.

Hab. Britain; France; Germany.

2. APATHUS NEMORUM. B.M.

Apis nemorum, *Fabr. Ent. Syst.* ii. 317. 11, and *Cab. Banks. Mus. Linn. Soc.* ♀.
Bremus æstivalis, *Panz. Faun. Germ.* 89. 16.
Apis vestalis, *Fourc. Ent. Par.* ii. 450. 27.
Kirby, Mon. Ap. Angl. ii. 347. 95. t. 18. f. 3 ♀ (nec f. 4 ♂).
Bombus nemorum, *Fabr. Syst. Piez.* p. 345. 8.
Bombus vestalis, *Latr. Hist. nat. Ins.* xiv. 65. 9.
Dahlb. Bomb. Scand. p. 51. 34.
Illig. Mag. v. 174. 60.
Psithyrus vestalis, *St. Farg. Hym.* ii. 430. 3 ♀.

Psithyrus æstivalis, *Drews. & Schiödte, Kröy. Tidsskr.* ii. 124. 3 ♀.
Nyland. Ap. Boreal. p. 241. 3.
Apathus nemorum, *Smith, Zool.* ii. 544. 4 ♂ ♀.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

3. APATHUS CAMPESTRIS. B.M.

Apis campestris, *Panz. Faun. Germ.* 74. 11.
Kirby, Mon. Ap. Angl. ii. 335. 88 ♀ & t. 18. f. 2.
Apis Rossiella, *Kirby, Mon. Ap. Angl.* ii. 331. 85 ♂ & t. 18. f. 1 ♂.
Apis Francisana, *Kirby, Mon. Ap. Angl.* ii. 334. 87 ♂, var.
Apis Leeana, *Kirby, Mon. Ap. Angl.* ii. 333. 86 ♂, var.
Apis subterranea, *Kirby, Mon. Ap. Angl.* ii. 371. 109 ♂, var.
Bombus campestris, *Fabr. Syst. Piez.* p. 344. 7 ♀.
Illig. Mag. v. 173. 78.
Dahlb. Bomb. Scand. 51. 34.
Bombus Francisanus, *Illig. Mag.* v. 165. 14 ♂.
Bombus Rossiellus, *Dahlb. Bomb. Scand.* 40. 15 ♂.
Psithyrus Rossiellus, *Drews. & Schiödte, Kröy. Tidsskr.* ii. 123. 1. t. 2. f. *g* ♂.
Nyland. Ap. Boreal. p. 242. 5.
Psithyrus campestris, *St. Farg. Hym.* ii. 433. 4 ♀.
Drews. & Schiödte, Kröy. Tidsskr. ii. 123. 2.
Nyland. Ap. Boreal. p. 242. 4.
Apathus campestris, *Smith, Zool.* ii. 543. 2 ♂ ♀.
Psithyrus Francisanus, *Drews. & Schiödte, Kröy. Tidsskr.* 125. 4.
Nyland. Ap. Boreal. p. 241. 2 ♂.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

4. APATHUS BARBUTELLUS. B.M.

Apis Barbutella, *Kirby, Mon. Ap. Angl.* ii. 343. 93 ♀, t. 18. f. 4 ♂.
Psithyrus quadricolor, *St. Farg. Hym.* ii. 428. 2 ♂.
Apathus Barbutellus, *Smith, Zool.* ii. 543. 3 ♂ ♀.

Hab. Britain; France; Denmark; Sweden; Finland; Lapland.

5. APATHUS ARENARIUS. B.M.

Apis arenaria, *Panz. Faun. Germ.* 74. 12 ♀.
Psithyrus rupestris, *St. Farg. Hym.* ii. 427, var.
Psithyrus Pyrenæus, *St. Farg. Hym.* i. 427, var. 2 (*type sp. in Coll. Westw.*).

Hab. France; Germany; Polish Ukraine.

6. APATHUS FRATERNUS. B.M.

Male. Length 10 lines.—Black; the face below the insertion of the antennæ densely covered with dark fuscous pubescence; the flagellum very slender, the joints subarcuate; on the vertex the pubescence is mixed with fulvous. Thorax clothed with short fulvo-ochraceous pubescence, on the middle of the disk it is black; the wings fuscous, darkest towards their base; the legs clothed with short dark fuscous pubescence. Abdomen elongate, narrowed towards the apex; the two basal segments clothed with short fulvo-ochraceous, and the apical segments with short black pubescence.

Hab. North America.

7. APATHUS CITRINUS. B.M.

Male. Length 6½ lines.—Black, the face densely clothed with long black pubescence; on the vertex it is obscurely yellow. Thorax thinly clothed above with long lemon-coloured pubescence, having a black band between the wings; the wings fusco-hyaline, slightly clouded at their apical margins; the sides of the thorax have a yellow pubescence, but beneath and also on the legs it is black. Abdomen, the three basal segments clothed with lemon-coloured pubescence, the apical ones with black; beneath black.

Hab. United States.

8. APATHUS BRASILIENSIS.

Female. Length 7 lines.—Black; head subrotundate, the face clothed with black pubescence, that on the vertex mixed with a few yellow hairs. Thorax clothed anteriorly with long yellow pubescence; the disk shining, thinly covered with black hairs; the metathorax, the sides and beneath have also a black pubescence; the wings subhyaline, their nervures ferruginous. Abdomen shining, the base thinly clothed with black pubescence: on the third and fourth segments it is white, but on the apical ones it is black; the apical segment incurved, nearly naked and acute.

Hab. Brazil (Para). (Coll. F. Smith.)

Genus 62. BOMBUS.

Apis, pt., *Linn. Syst. Nat.* i. 953 (1766).
Bombus, *Latr. Hist. nat. Ins.* xiv. 63 (1802).
Bremus, *Jurine, Hym.* (1807).

1. BOMBUS MUSCORUM. B.M.

Apis muscorum, *Linn. Faun. Suec.* 1714, and *Cab. Mus. Linn. Soc.*; *Syst. Nat.* ed. 10. no. 32.
Fourc. Ent. Par. ii. 451. 29.
Apis collium, *Scop. Ent. Carn.* 823.
Apis fasciata, *Scop. Ann. Hist. Nat.* iv. 12. 7.
Apicis vulgo, *Harris, Expos.* 137. 13. t. 40. f. 13 ♀.
Apicis melinus, *Harris, Expos.* 138. 17. t. 40. f. 17 ♂.
Apis agrorum, *Fabr. Ent. Syst.* ii. 321. 29 ♀, var.?
Kirby, Mon. Ap. Angl. ii. 326. 81 ♀, var.
Apis pygmæus, *Fabr. Ent. Syst.* ii. 324. 44 ♂.
Apis floralis, *Kirby, Mon. Ap. Angl.* ii. 321. 76 ♀, t. 17. f. 14 ♂, and *Cab. Mus. Ent. Soc.*
Apis Beckwithella, *Kirby, Mon. Ap. Angl.* ii. 323. 78 ♀, var. β ♂, and *Cab. Mus. Ent. Soc.*
Apis Sowerbiana, *Kirby, Mon. Ap. Angl.* ii. 322. 77 ♂, and *Cab. Mus. Ent. Soc.*
Apis Curtisella, *Kirby, Mon. Ap. Angl.* ii. 324. 79 ♂, and *Cab. Mus. Ent. Soc.*
Apis Francillonella, *Kirby, Mon. Ap. Angl.* ii. 319. 75 ♂, t. 17. f. 13, and *Cab. Mus. Ent. Soc.*
Apis Forsterella, *Kirby, Mon. Ap. Angl.* ii. 325. 80 ♂, and *Cab. Mus. Ent. Soc.*
Bremus agrorum, *Panz. Faun. Germ.* 85. 20.
Bombus agrorum, *Fabr. Syst. Piez.* 348. 30 ♀.
Dahlb. Bomb. Scand. 48. 28 ♂, ♀, ♂.
Drews. & Schiödte, Kröy. Tidsskr. ii. 108. 2.
Nyland. Ap. Boreal. p. 228. 4.
Bombus pygmæus, *Fabr. Syst. Piez.* 258. 54 ♂.
Bombus muscorum, *Smith, Zool.* ii. 545. 2 ♂, ♀, ♂.
L'abeille fauve à ventre jaune et extrémité fauve, *Geoff. Ins. Par.* ii. 419. 42.

Hab. Europe.

2. BOMBUS SENILIS. B.M.

Apis senilis, *Fabr. Syst. Ent.* 382. 26, and *Cab. Banks. Mus. Linn. Soc.* var. ♂.
Rossi, Faun. Etrus. ii. 102. 909 ♂.
Apis muscorum, *Fabr. Syst. Ent.* 381. 17 ♀.
Schrank, Ins. Aust. 801.
Rossi, Faun. Etrus. ii. 100. 904.
Christ. Hym. 130. t. 8. f. 3, and 142. t. 11. f. 8 ♂.
Kirby, Mon. Ap. Angl. ii. 317. 74, and *Cab. Mus. Ent. Soc.*
Don. Eng. Ins. xi. 70. t. 382. f. 2.
Apicis impavidus, *Harris, Expos.* 131. 6. t. 38. f. 6 ♀.

Apicis melleus, *Harris, Expos.* 138. 18. t. 11. f. 18.
Bombus muscorum, *Fabr. Syst. Piez.* 349. 32.
Latr. Hist. Nat. xiv. 65. 7.
Dahlb. Bomb. Scand. 47. 27.
Brullé, Expéd. de Morée, iii. 328. 733.
Westw. Nat. Lib. xxxviii. 225. t. 17. f. 1; p. 252. t. 16. f. 3.
Drews. & Schiödte, Kröy. Tidsskr. ii. 107. 1.
Nyland. Act. Soc. Sc. Fenn. 227. 1.
Bombus senilis, *Fabr. Syst. Piez.* 352. 50.
Smith, Zool. ii. 544. 1.
Bremus muscorum, *Jurine, Hym.* 261.
Bombus cognatus, *Steph. Brit. Ent. Mand. Supp.* vii. 17. t. 43. f. 3 ♀.
Bombylius, *Ray, Hist. Ins.* 246. 3.
Bourdon, *Reaum.* vi. *Mem.* i. 32. t. 2. f. 1, 2, 3.

Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

3. Bombus autumnalis.

Apis autumnalis, *Fabr. Ent. Syst.* ii. 324. 43.
Bombus autumnalis, *Fabr. Syst. Piez.* 352. 47.
Zett. Ins. Lapp. p. 474. 7.

Hab. Germany?; Lapland.

4. Bombus Italicus. B.M.

Apis italicus, *Fabr. Ent. Syst.* ii. 321. 31.
Bombus italicus, *Fabr. Syst. Piez.* p. 349. 31.
Spin. Ins. Lig. p. 130. 3.
Bremus italicus, *Panz. Faun. Germ.* 89. 17.

Hab. Italy.

5. Bombus Smithianus. B.M.

Bombus arcticus, *Dahlb. Bomb. Scand.* p. 50. 32. f. 20 ♀? (nec *Kirby*).
Zett. Ins. Lapp. p. 476. 13.
Nyland. Ap. Boreal. p. 228. 2.
Bombus Smithianus, *White, Proc. Linn. Soc.* 1851; *Ann. & Mag. Nat. Hist.* x. new ser. p. 294.

Hab. Britain (Shetland); Norway; Lapland; Finland.

6. Bombus meridianus. B.M.

Apis meridiana, *Panz. Faun. Germ.* 80. 19 (nec hypnorum, *Linn.*).

Hab. Germany.

7. Bombus hyperboreus.

Bombus hyperboreus, *Dahlb. Bomb. Scand.* p. 42. 19.
Zett. Ins. Lapp. p. 475. 11.
Schönh. Act. Holm. i. p. 57. t. 3. f. 2 ♀.
Nyland. Ap. Boreal. p. 230. 8.
Hab. Lapland.

8. Bombus hypnorum.

Apis hypnorum, *Linn. Faun. Suec.* no. 1715; *Syst. Nat.* i. 960. 47.
Fabr. Ent. Syst. ii. 322. 32.
Bombus hypnorum, *Fabr. Syst. Piez.* p. 349. 33.
Panz. Faun. Germ. 7. 12.
Dahlb. Bomb. Scand. p. 50. 31.
Zett. Ins. Lapp. p. 475. 12.
St. Farg. Hym. i. 465. 10 ♂ (*type sp. in Coll. Westw.*).
Drews. & Schiödte, Kröy. Tidsskr. ii. 110. 6.
Bombus Apricus, *Fabr. Syst. Piez.* p. 348. 29.
Panz. Faun. Germ. 80. 20 (worker).
Zett. Ins. Lapp. p. 475. 12.
St. Farg. Hym. i. 465. 10 ♀ (*type sp. Coll. Westw.*).
Hab. France; Denmark; Sweden; Finland; Lapland.

9. Bombus equestris.

Apis equestris, *Fabr. Ent. Syst.* ii. 320. 23.
Bombus equestris, *Fabr. Syst. Piez.* p. 347. 22.
Illig. Mag. v. 171. 43.
Drews. & Schiödte, Kröy. Tidsskr. ii. 110. 5. t. 2. f. *e*.
Nyland. Ap. Boreal. p. 230. 7.
Apis arctica, *Quenzel, Acerbi's Trav. Lap.* ii. 253. t. 1. f. 7? (1802).
Hab. Denmark.

10. Bombus fragrans. B.M.

Apis fragrans, *Pallas, It.* i. 474. 75.
Kirby, Mon. Ap. Angl. ii. 329. 88 ♂.
Apis pratorum, *Fabr. Ent. Syst.* ii. 322. 34.
Bombus pratorum, *Fabr. Syst. Piez.* p. 349. 36.
Bombus fragrans, *Illig. Mag.* v. 165. 10.
Dahlb. Bomb. Scand. p. 46. 26. f. 16.
St. Farg. Hym. i. 464. 9.
Smith, Zool. ii. 545. 3.
Drews. & Schiödte, Kröy. Tidsskr. ii. 121. 17.
Nyland. Ap. Boreal. p. 229. 6.
Hab. Britain; France; Italy; Germany; Denmark; Sweden; Finland; Lapland; Siberia.

11. Bombus zonatus. B.M.

Female. Length 9 lines.—Black; the head has a black pubescence, the anterior portion of the thorax as far as the insertion of the wings clothed with fulvo-ochraceous pubescence, the rest of the thorax and the basal segment of the abdomen clothed with black pubescence; the second, third and fourth segments of the abdomen have a fulvo-ochraceous pubescence, that on the two apical segments is black; the wings fuscous, the legs black.

Hab. Greece (Zanti).

Closely resembling *B. Americanorum*, but the wings are paler, and the abdomen has three segments covered with yellow pubescence; in *B. Americanorum* only two are yellow.

12. Bombus ericetorum.

Apis ericetorum, *Panz. Faun. Germ.* 75. 19 (hypnorum ♂?).
Bombus ericetorum, *Fabr. Syst. Piez.* p. 345. 12.

Hab. Germany.

13. Bombus Latreillellus. B.M.

Apis Latreillella, *Kirby, Mon. Ap. Angl.* ii. 330. 84 ♂.
Apis Tunstallana, *Kirby, Mon. Ap. Angl.* ii. 346. 94 ♀.
Bombus Latreillellus, *Illig. Mag.* v. 165. 11 ♂.
Dahlb. Bomb. Scand. p. 39. 14.
Drews. & Schiödte, Kröy. Tidsskr. ii. 120. 16.
Nyland. Ap. Boreal. p. 234. 18.
Bombus Tunstallanus, *Drews. & Schiödte, Kröy. Tidsskr.* ii. 119. 14 ♀.
Nyland. Ap. Boreal. p. 231. 10.

Hab. Britain; France; Denmark.

14. Bombus sylvarum. B.M.

Apis sylvarum, *Linn. Faun. Suec.* 1713, and *Cab. Mus. Linn. Soc.*; *Syst. Nat.* i. 960. 45.
Scop. Ent. Carn. 822.
Fabr. Syst. Ent. p. 321. 27.
Rossi, Faun. Etrus. ii. 906?
Kirby, Mon. Ap. Angl. ii. 326. 82. t. 17. f. 15 ♀, f. 16 ♂.
Bremus sylvarum, *Panz. Faun. Germ.* 85. 19?
Bombus sylvarum, *Fabr. Syst. Piez.* p. 348. 27.
Latr. Hist. Nat. xiv. 65. 8.
Illig. Mag. v. 164. 9.
Spin. Ins. Lig. p. 131. 6.
Dahlb. Bomb. Scand. p. 44. 24.

Bombus sylvarum, *St. Farg. Hym.* i. 463. 8.
Drews & Schiödte, Kröy. Tidsskr. ii. 109. 4.
Smith, Zool. ii. 546. 4.
Nyland. Ap. Boreal. p. 236. 22.
Bombus veteranus, *Fabr. Syst. Piez.* p. 352. 52.
Huber, Obs. Trans. Linn. Soc. vi. 227. t. 25. f. 13, 18.
Hab. Britain; France; Germany; Denmark; Sweden; Finland.

15. BOMBUS TERRESTRIS. B.M.

Apis terrestris, *Linn. Faun. Suec.* 1709, and *Cab. Mus. Linn. Soc.* ♀.
Scop. Ent. Carn. p. 815 & f. 815 ♀.
Fabr. Syst. Ent. p. 379. 5.
Schrank, Ins. Aust. p. 395. 796.
Rossi, Faun. Etrus. ii. 99. 902, nec var.
Don. Brit. Ins. iii. 41. t. 88. f. 1.
Panz. Faun. Germ. p. 1. 16.
Kirby, Mon. Ap. Angl. ii. 350, var. γ. Acul.
Apicis audax, *Harris, Expos.* p. 130. t. 38. f. 1.
Bombus terrestris, *Latr. Hist. Nat. Ins.* xiv. 64. 1.
Fabr. Syst. Piez. p. 343. 4.
Dahlb. Bomb. Scand. p. 34. 5. f. 5?
Brullé, Expéd. Sc. de Morée, p. 523. 730?
Drews. & Schiödte, Kröy. Tidsskr. ii. 118. 12?
Westw. Nat. Lib. xxxviii. 243. t. 14. f. 1, 2, 3.
Nyland. Ap. Boreal. p. 232. 13?
Smith, Zool. ii. 547. 10.
Lucas, Expéd. Sc. Algér. iii. 142. 3?
Ray, Hist. Ins. p. 247. 5 ♂, & 248. 15 ♀.
Reaum. Ins. vi. *Mem.* 1st, 2. t. 3. f. 1.
Frisch, Ins. ix. 17. f. 13 ♀.
Sultz. Ins. t. 19. f. 124.
Schæff. Icon. t. 251. f. 7.
Hab. Britain; France; Germany; Italy; Denmark; Sweden; Algeria.

16. BOMBUS COLLINUS. B.M.

Bombus collinus, *Smith, Zool.* ii. 548. 17 ♂.
Hab. Britain.

17. BOMBUS LUCORUM. B.M.

Apis lucorum, *Linn. Faun. Suec.* 1716, and *Cab. Mus. Linn. Soc.* ♂.
Fabr. Syst. Ent. ii. 322. 35.
Schrank, Ins. Aust. p. 808.
Kirby, Mon. Ap. Angl. ii. 336. 89.

Apis hortorum, *Scop. Ent. Carn.* p. 817 ♀.
Fabr. Syst. Ent. ii. 320. 22.
Apis terrestris, *Christ. Hym.* p. 127. t. 7. f. 2 ♀.
Kirby, Mon. Ap. Angl. ii. 350, and *Cab. Mus. Ent. Soc.* (not var. γ.)
Apis cæspitum, *Panz. Faun. Germ.* p. 31. 19 ♂.
Bremus fasciatus, *Panz. Faun. Germ.* p. 90. 17.
Apis virginalis, *Kirby, Mon. Ap. Angl.* ii. 349. 95, and *Cab. Mus. Ent. Soc.* ♂.
Bombus lucorum, *Fabr. Syst. Piez.* p. 350. 37 ♂.
Dahlb. Bomb. Scand. p. 42. 20 ♂.
Smith, Zool. ii. 546. 6 ♂, ♀, ♂.
Bombus virginalis, *Illig. Mag.* v. 167. 20 ♂.
Dahlb. Bomb. Scand. p. 35. 6.
Nyland. Act. Soc. Sc. Fenn. p. 233. 14.
Bombus ericetorum, *Curtis, Brit. Ent.* xii. t. 564.
Bombus terrestris, *Drews. & Schiödte, Kröy. Tidsskr.* ii. 118. 12.
Bombus sporadicus, *Nyland. Ap. Boreal.* 233. 15.

Hab. Britain; France; Germany; Sweden; Austria; Finland; Denmark.

A form of this species received from Portugal has the pubescence on the legs fulvous.

18. BOMBUS HORTORUM. B.M.

Apis hortorum, *Linn. Faun. Suec.* 1710, and *Cab. Mus. Linn. Soc.* ♀; *Syst. Nat.* i. 960. 26.
Schrank, Ins. Aust. p. 797.
Rossi, Faun. Etrus. ii. 100. 903?
Apicis fidens, *Harris, Expos.* p. 130. 3. t. 38. f. 3 ♀.
Apis terrestris, *Rossi, Faun. Etrus.* ii. 99. 902 ♀.
Bombus hortorum, *Latr. Hist. Nat.* xiv. 65. 5 ♀.
Illig. Mag. v. 166. 17.
Walck. Ins. Par. ii. 146.
Dahlb. Bomb. Scand. p. 38. 12 ♂, ♀, ♂.
St. Farg. Hym. i. 466. 12.
Brullé, Expéd. Sc. de Morée, iii. 328. 731.
Drews. & Schiödte, Kröy. Tidsskr. ii. 120. 16.
Smith, Zool. ii. 546. 7.
Nyland. Ap. Boreal. p. 231. 11.
Ray, Hist. Ins. p. 248. 11.
Geoffr. Hist. Ins. ii. 418. 25.
Huber, Obs. p. 226. t. 25. f. 10–12.

Hab. Britain; France; Germany; Italy; Austria; Denmark; Sweden; Finland; Lapland; Siberia.

19. Bombus Scrimshiranus. B.M.

Apis Jonella, *Kirby, Mon. Ap. Angl.* ii. 338, 90 ♂, and *Cab. Mus. Ent. Soc.*

Apis Scrimshirana, *Kirby, Mon. Ap. Angl.* ii. 342. 92 ♀, and *Cab. Mus. Ent. Soc.*

Bombus Scrimshiranus, *Illig. Mag.* v. 166. 18.
Dahlb. Bomb. Scand. p. 39. 13 ♀, ♂.
Drews. & Schiödte, Kröy. Tidsskr. ii. 118. 12.
Smith, Zool. ii. 547 ♂, ♀, ♂.
Nyland. Ap. Boreal. p. 232. 12 ♀, ♂.

Bombus Jonellus, *Illig. Mag.* v. 166. 16 ♂.
Dahlb. Bomb. Scand. p. 43. 21 ♂?

Hab. Britain; Denmark; Sweden; Finland; Lapland; Siberia.

20. Bombus subterraneus. B.M.

Apis subterranea, *Linn. Faun. Suec.* no. 1718; *Syst. Nat.* i. 961. 51, and *Cab. Mus. Linn. Soc.*
Fabr. Ent. Syst. ii. 322. 37.
Müller, Prodr. Z. Dan. p. 165. 1928.

Apis Harrisella, *Kirby, Mon. Ap. Angl.* ii. 373. 110. t. 18. f. 7.

Bombus subterraneus, *Fabr. Syst. Piez.* p. 345. 10.
Dahlb. Bomb. Scand. p. 31. 11.
Drews. & Schiödte, Kröy. Tidsskr. ii. 116. 11.
Nyland. Ap. Boreal. p. 239. 27.
Smith, Cat. Hym. Acul. p. 102. 9.

Bombus Harrisellus, *Westw. Nat. Lib.* xxxviii. 256. t. 18. f. 1 ♂.
Smith, Zool. ii. 550. 16.

Bombus soroensis, *St. Farg. Hym.* i. 468. 14 (*type sp. in Coll. Westw.*).

Bombus Burrellanus, *St. Farg. Hym.* i. 462. 6 ♂ (*type sp. in Coll. Westw.*).

Bombus flavo-nigrescens, *Smith, Zool.* iv. 1566.

Hab. Britain; France; Germany; Denmark; Sweden; Lapland.

21. Bombus soroensis. B.M.

Apis soroensis, *Fabr. Ent. Syst.* ii. 318. 12 ♀.
Panz. Faun. Germ. p. 7. 11.

Bombus soroensis, *Fabr. Syst. Piez.* p. 345. 10.
Dahlb. Bomb. Scand. p. 43. 22.
Drews. & Schiödte, Kröy. Tidsskr. ii. 112. 8. t. 2. f. *e* ♂, *f* ♀.

Apis neutra, *Panz. Faun. Germ.* p. 83. 18.

Apis Cullumana, *Kirby, Mon. Ap. Angl.* ii. 359. 102 ♂.

Bombus neutra, *St. Farg. Hym.* i. 469. 15.

Hab. Britain; France; Germany; Denmark; Sweden.

22. Bombus nivalis. B.M.

Bombus nivalis, *Dahlb. Bomb. Scand.* p. 40. 16 ♀
Zett. Ins. Lapp. p. 474. 7.
Nyland. Ap. Boreal. p. 234. 17?
Apis alpina, *Fabr.* (*Otho*) *Faun. Grœnl.* p. 199. 155?
Hab. Britain (Perthshire and Shetland); Lapland.

23. Bombus Grœnlandicus. B.M.

Bombus Grœnlandicus, *Westerm. MS.* ?

Female. Length 9–10 lines.—Black; the pubescence on the face black, that on the vertex is also black; the face elongate. Thorax, above, anteriorly and posteriorly having a long loose yellow pubescence, between the wings a broad band of black; wings subhyaline, stained with fuscous towards their base; the legs have a black pubescence. Abdomen, the two basal segments covered with long yellow pubescence, the apical ones with black.

Hab. Greenland.

24. Bombus consobrinus.

Bombus consobrinus, *Dahlb. Bomb. Scand.* p. 49. 30 ♀.
Nyland. Ap. Boreal. p. 229. 5.

Hab. Sweden; Finland; Lapland.

25. Bombus cryptarum.

Apis cryptarum, *Fabr. Ent. Syst.* ii. 317. 9.
Bombus cryptarum, *Fabr. Syst. Piez.* p. 344. 5.

Hab. Copenhagen.

26. Bombus mniorum.

Bombus mniorum, *Fabr. Syst. Piez.* p. 350. 40.
Drews. & Schiödte, Kröy. Tidsskr. ii. 108. 3. t. 2. f. *a* ♀, f. *b* ♂.
Nyland. Ap. Boreal. p. 240. 29.

Hab. Denmark.

27. Bombus Altaicus.

Bombus Altaicus, *Eversm. Bull. Mosc.* xix. 436. t. 4. f. 1.

Hab. Russia.

28. Bombus patagiatus.

Bombus patagiatus, *Nyland. Ap. Boreal.* p. 234. 16.

Hab. Siberia.

29. Bombus Ligusticus.

Bombus Ligusticus, *Spin. Ins. Lig.* fasc. 1. p. 29.
St. Farg. Hym. i. 471. 21 (*type sp. in Coll. Westw.*).
Bombus scutellatus, *Jurine, Hym.* t. 12. gen. 37.
Hab. Italy.

30. Bombus pratorum. B.M.

Apis pratorum, *Linn. Faun. Suec.* no. 1711; *Syst. Nat.* i. 960. 43, and *Cab. Mus. Linn. Soc.* ♂.
Schrank, Ins. Aust. no. 798.
Kirby, Mon. Ap. Angl. ii. 360. 103.
Apis collaris, *Scop. Ent. Carn.* no. 818.
Apis Arbustorum, *Fabr. Ent. Syst.* ii. 320. 24 ♂.
Apis subinterrupta, *Kirby, Mon. Ap. Angl.* ii. 356. 99 ♀.
Apis Donovanella, *Kirby, Mon. Ap. Angl.* ii. 357. 100. t. 18. f. 6 ♀ (var.).
Apis Burrellana, *Kirby, Mon. Ap. Angl.* ii. 358. 101 ♂.
Bombus arbustorum, *Fabr. Syst. Piez.* p. 347. 23.
Zett. Ins. Lapp. p. 473. 5.
Bombus subinterruptus, *Latr. Hist. Nat.* xiv. 64. 4.
Illig. Mag. v. 167. 20.
Dahlb. Bomb. Scand. p. 35. 7.
St. Farg. Hym. i. 461. 5 (*type sp. in Coll. Westw.*).
Drews. & Schiödte, Kröy. Tidsskr. ii. 111. 7.
Bombus Burrellanus, *Dahlb. Bomb. Scand.* p. 43. 22 ♂.
Bombus ephippium, *Dahlb. Bomb. Scand.* p. 37. 10 ♀.
Zett. Ins. Lapp. p. 473. 6.
Bombus pratorum, *Illig. Mag.* v. 168. 27.
Dahlb. Bomb. Scand. p. 36. 9 ♂.
Drews. & Schiödte, Kröy. Tidsskr. ii. 111. 7.
Smith, Zool. ii. 548. 11.
Bombus Donovanella, *Westw. Nat. Lib.* xxxviii. 255. t. 17. f. 2 ♂.
Bombus lullianus, *Nyland. Ap. Boreal.* p. 236. 21 ♂.
Hab. Britain; France; Germany; Austria; Denmark; Sweden; Finland; Lapland.

31. Bombus montanus. B.M.

Bombus montanus, *St. Farg. Hym.* i. 463. 7 (*type sp. in Coll. Westw.*).
Hab. France; The Pyrenees; Polish Ukraine.

32. Bombus tricolor.

Bombus tricolor, *Dahlb. Bomb. Scand.* p. 40. 17 (var. nivalis?).
Zett. Ins. Lapp. p. 474. 9.
Hab. Denmark; Lapland.

33. Bombus alpinus.

Apis alpina, *Linn. Faun. Suec.* no. 1719; *Syst. Nat.* i. 961. 55.
Bombus alpinus, *Fabr. Syst. Piez.* p. 343. 2.
Ahrens, Faun. Europ. p. 10. 17.
Zett. Ins. Lapp. p. 471. 2.
Dahlb. Bomb. Scand. p. 32. 2.
Nyland. Ap. Boreal. p. 238. 24.
Bombus rufescens, *St. Farg. Hym.* i. 460. 1 (*type sp. in Coll. Westw.*).

Hab. Sweden; France; Finland; Lapland.

34. Bombus Lapponicus. B.M.

Apis Lapponica, *Fabr. Ent. Syst.* ii. 318. 13.
Quenz. Acerbi's Trav. Lap. ii. 253. t. 1. f. 3.
Bombus Lapponicus, *Fabr. Syst. Piez.* p. 345. 11.
Ahrens, Faun. Europ. p. 10. 18.
Dahlb. Bomb. Scand. p. 41. 18.
Zett. Ins. Lapp. p. 474. 10.
St. Farg. Hym. i. 459. 1 (*type sp. in Coll. Westw.*).
Nyland. Ap. Boreal. p. 235. 20.
Bombus regelationis, *Newm. Ent. Mag.* ii. 327 (nec *Panz.*).
Bombus montanus, *Smith, Zool.* ii. 549. 13 (nec *St. Farg.*).
Bombus monticola, *Smith, Zool.* vii. *App.* p. 59.

Hab. Britain; Lapland; France.

35. Bombus Derhamellus. B.M.

Apis Derhamella, *Kirby, Mon. Ap. Angl.* ii. 363. 105, and *Cab. Mus. Ent. Soc.* ♂.
Apis Raiella, *Kirby, Mon. Ap. Angl.* ii. 367. 107, and *Cab. Mus. Ent. Soc.* ♀.
Bombus Derhamellus, *Dahlb. Bomb. Scand.* p. 44. 23 ♂, ♀, ♂.
Bombus Raiellus, *Illig. Mag.* v. 169. 31.
Dahlb. Bomb. Scand. p. 33. 4.
Drews. & Schiödte, Kröy. Tidsskr. ii. 115. 9.
Smith, Zool. ii. 550. 15.
Nyland. Ap. Boreal. p. 238. 26.
Bombylus minor, *Ray, Hist. Ins.* p. 246. 2.

Hab. Britain; France; Denmark; Sweden; Finland; Lapland.

36. Bombus lapidarius. B.M.

Apis lapidaria, *Linn. Faun. Suec.* 1712, and *Cab. Mus. Linn. Soc.* ♀; *Syst. Nat.* i. 960. 44.

Apis lapidaria, *Scop. Ent. Carn.* 813, and f. 813 ♀, no. 1.
Fabr. Syst. Ent. p. 381. 14.
Schrank. Ins. Aust. p. 799.
Fourc. Ent. Par. ii. 449. 22.
Christ. Hym. p. 126, and t. 7. f. 1 ♀.
Don. Eng. Ins. iii. 97, and t. 108. f. 1 ♀, t. 58. f. 2 ♂.
Kirby, Mon. Ap. Angl. ii. 363. 106 ♂, ♀, ♂.
Apicis pertristis, *Harris, Expos.* p. 137, and t. 40. f. 14 ♂.
Apicis opis, *Harris, Expos.* p. 137. t. 40. f. 12 ♂.
Apis coronata, *Fourc. Ent. Par.* ii. 449. 23 ♂.
Apis arbustorum, *Fabr. Ent. Syst.* ii. 320. 24 ♂.
Bremus regelationis, *Panz. Faun. Germ.* p. 86. 17 ♂.
Bombus lapidarius, *Latr. Hist. Nat. Ins.* xiv. 64. 2 ♀.
Fabr. Syst. Piez. p. 347. 25.
Spin. Ins. Lig. fasc. i. p. 130. 4.
Dahlb. Bomb. Scand. p. 30. 1 ♂, ♀, ♂.
St. Farg. Hym. i. 460. 3.
Brullé, Expéd. Sc. de Morée, iii. p. 528. 729.
Drews. & Schiödte, Kröy. Tidsskr. ii. 116. 11.
Westw. Nat. Lib. xxxviii. 252. t. 16. f. 1, 2.
Smith, Zool. ii. 549. 14.
Nyland. Ap. Boreal. p. 238. 25.
Ray, Hist. Ins. p. 247. no. 7.
Reaum. Ins. vi. 2. 3. t. 1. f. 1–4.
Schäff. Icon. Ins. t. 69. f. 9.
Huber, Obs. Linn. Trans. vi. 223. t. 25. f. 1, 2, 3.
Bombus Lefebvrei, *St. Farg. Hym.* i. 461. 4 (*type sp. in Coll. Westw.*).

Hab. Britain; France; Germany; Austria; Denmark; Sweden; Finland; Lapland.

37. BOMBUS RUDERATUS.

Apis ruderata, *Fabr. Ent. Syst.* ii. 317. 10.
Bombus ruderatus, *Fabr. Syst. Piez.* p. 344. 6 ♀, and *Cab. Banks. Mus. Linn. Soc.*
Bombus hortorum, *St. Farg. Hym.* i. 466 (nec *Linn.*) (*type sp. in Coll. Westw.*).

An examination of the authentic specimen proves this insect to be distinct from the "*hortorum*" of Linnæus, with which it has hitherto been confounded; the black band on the abdomen only occupies one segment, the general pubescence of the insect is shorter and more dense than in *B. hortorum*, and the mouth is less produced.

Hab. Madeira.

38. Bombus Antiguensis.

Apis antiguensis, *Fabr. Ent. Syst.* ii. 318. 16.
Bombus antiguensis, *Fabr. Syst. Piez.* p. 346. 15.

Hab. Antigua.

39. Bombus melanurus.

Bombus melanurus, *St. Farg. Hym.* i. 469. 16 ♀ (*type sp. in Coll. Westw.*).

Hab. Syria.

40. Bombus eriophorus.

Bombus eriophorus, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), p. 265.

Hab. The Caucasus.

41. Bombus albocinctus.

Female. Length 10 lines.—Black; the pubescence black. Thorax, the collar having a white band, also the first and third segments of the abdomen clothed with white pubescence.

Hab. Kamtschatka. (In Coll. Linn. Soc. Lond.)

42. Bombus Sitkensis.

Bombus Sitkensis, *Nyland. Ap. Boreal.* p. 235. 19.

Hab. Sitka; Russian North America.

43. Bombus Polaris.

Bombus Polaris, *Curtis, Ross's 2nd Voy. App.* p. lxiii. 7.

Female. Length 10 lines.—Black; clothed with yellow hairs above, with a black band across the thorax, and an indistinct one across the abdomen.

Hab. Arctic Regions.

44. Bombus Kirbiellus. B.M.

Bombus Kirbiellus, *Curtis, Ross's 2nd Voy. App.* p. lxii. 6. pl. A. fig. 2.

Female. Length 10 lines.—Black; anterior and posterior margins of the thorax, and base and apex of the abdomen clothed with yellowish hairs.

Hab. Arctic Regions (Boothia Felix). (Coll. W. W. Saunders, Esq.)

45. Bombus Americanorum. B.M.

Apis Americanorum, *Fabr. Ent. Syst.* ii. 319. 18.
Bombus Americanorum, *Fabr. Syst. Piez.* p. 346. 16.
St. Farg. Hym. i. 472. 22 (*type sp. in Coll. Westw.*).

Hab. North America (St. John's Bluff, East Florida).

46. Bombus Carolinus.

Bombus Carolinus, *Fabr. Syst. Piez.* p. 342. 1.

Hab. North America.

47. Bombus Virginicus. B.M.

Apis Virginica, *Fabr. Ent. Syst.* ii. 318. 15.
Bombus Virginicus, *Fabr. Syst. Piez.* p. 346. 14.
St. Farg. Hym. i. 470. 17 (*type sp. in Coll. Westw.*).

Hab. North America (St. John's Bluff, East Florida).

48. Bombus laboriosus.

Bombus laboriosus, *Fabr. Syst. Piez.* p. 352. 51.

Hab. Carolina.

49. Bombus fervidus. B.M.

Apis fervida, *Fabr. Ent. Syst. Supp.* p. 274. 43.
Bombus fervidus, *Fabr. Syst. Piez.* p. 352. 48.
St. Farg. Hym. i. 470. 8 (*type sp. in Coll. Westw.*).

Hab. North America (Trenton Falls).

50. Bombus arcticus.

Bombus arcticus, *Kirby, Parry's 1st Voy.* (1821) *Append.* p. ccxvi, ♂ ♀.

Hab. Arctic America.

51. Bombus ternarius.

Bombus ternarius, *Say, Bost. Journ. Nat. Hist.* i. 414. 3.

Hab. Indiana.

52. Bombus ornatus. B.M.

Female. Length 7 lines.—Black; the pubescence on the head black, mixed with yellow hairs at the insertion of the antennæ; the thorax has a rich fulvo-ochraceous pubescence, and has a broad black band between the wings, the sides of the

thorax anteriorly yellow; the legs have a black pubescence, with a few pale hairs at the base of the femora beneath; wings fusco-hyaline. Abdomen, the pubescence on the basal segment yellow, on the three following segments it is fulvous, having a narrow border of yellow, which divides it from the black pubescence which clothes the apex.

The colouring of the male and worker is the same, but less bright, and the pubescence is longer in the male than in the other sexes.

Hab. North America; Hudson's Bay; Arctic America.

53. BOMBUS VAGANS. B.M.

Female. Length 7 lines.—Black; the pubescence on the head black, that on the thorax above pale bright yellow; the wings subhyaline, the apical margins have a fuscous cloud, the pubescence on the legs black. Abdomen, the pubescence on the two basal segments yellow, on the following it is black.

Hab. North America.

54. BOMBUS FRIGIDUS. B.M.

Female. Length 7 lines.—Black; the pubescence of the head black, mixed with a few pale hairs at the insertion of the antennæ; the vertex has also some pale yellow pubescence. Thorax clothed with yellow pubescence, having a black band between the wings, the latter fusco-hyaline; the legs have a black pubescence, the fringe on the posterior tibiæ fulvous. Abdomen, the two basal segments clothed with rich yellow pubescence, the third with black, that on the apical segments fulvous.

Male. Resembling the female, but having the face clothed with yellow pubescence.

This species closely resembles the *B. montanus* of St. Fargeau. of which it may be the arctic form.

Hab. Arctic America; Hudson's Bay.

55. BOMBUS SONORUS.

Bombus sonorus, *Say, Bost. Journ. Nat. Hist.* i. 413. 1.

Hab. Mexico.

56. BOMBUS EPHIPPIATUS.

Bombus ephippiatus, *Say, Bost. Journ. Nat. Hist.* i. 414. 2.

Hab. Mexico.

57. Bombus Californicus. B.M.

Female. Length 10 lines.—Black; the pubescence on the head black, that on the thorax before the wings fulvo-ochraceous, posteriorly and beneath black; the legs black; wings fuscous. Abdomen, the pubescence black, except that on the fourth segment, which is yellow.

Male. Length 5–6 lines.—The pubescence as in the female, differing only in having that on the face yellow.

Hab. California.

58. Bombus rubicundus.

Female. Length 9 lines.—Black; the face clothed with fulvous pubescence, the mouth very slightly produced, head subrotundate; the thorax and abdomen above densely clothed with short rufo-fulvous pubescence; the wings smoky; the legs have a black pubescence.

This species closely resembles *B. Dahlbomii*, but that species has an elongate face clothed with black pubescence.

Hab. Columbia.

59. Bombus robustus. B.M.

Female. Length 10 lines.—Black; the pubescence on the head black, that on the thorax above orange-yellow, having a black band between the wings; the wings fuscous; the legs black. Abdomen, the three basal segments have a yellow pubescence, that on the fourth is black, on the fifth and sixth it is white.

Hab. Columbia.

60. Bombus funebris. B.M.

Female. Length 8 lines.—Black; the pubescence on the head black, that on the disk of the thorax snow-white; the wings fuscous; the pubescence on the legs black, that on the three basal segments of the abdomen black; on the apical segments it is white.

Hab. Quito.

61. Bombus violaceus. B.M.

Bombus violaceus, *St. Farg. Hym.* i. 473. 24 (*type sp. in Coll. Westw.*).

Hab. S. America (Monte Video); Brazil (Para).

62. BOMBUS BRASILIENSIS.

Bombus Brasiliensis, *St. Farg. Hym.* i. 470. 19 (*type sp. in Coll. Westw.*).

Hab. Brazil.

63. BOMBUS CAJENNENSIS. B.M.

Apis Cajennensis, *Fabr. Ent. Syst. Supp.* p. 273. 13–14.
Bombus Cajennensis, *Fabr. Syst. Piez.* p. 345. 13.
Bombus Cayennensis, *St. Farg. Hym.* i. 471. 20 (*type sp. in Coll. Westw.*).
Halid. Linn. Trans. xvii. 320. 16.

Hab. Cayenne; Brazil (Para; Rio Tapajos).

64. BOMBUS DAHLBOMII. B.M.

Bombus Dahlbomii, *Guér. Icon. Règ. Anim. Ins.* p. 459. t. 75. f. 3 ♀.
Bombus nigripes, *Halid. Linn. Trans.* xvii. p. 321. 21.
Bombus grandis, *Westw. Nat. Lib.* xxxviii. 255. t. 17. f. 2.
Bombus Chiliensis, *Spin. Faun. Chil.* vi. 165. 1.

Hab. Chili; Brazil (St. Paul's).

65. BOMBUS RUBRIVENTRIS.

Bombus rubriventris, *St. Farg. Hym.* i. 472. 23 (*type sp. in Coll. Westw.*).

Hab. Brazil.

66. BOMBUS RUFIPES.

Bombus rufipes, *St. Farg. Hym.* i. 473. 25 (*type sp. in Coll. Westw.*).

Hab. Java. (Coll. F. Smith.)

67. BOMBUS TUNICATUS. B.M.

Bombus tunicatus, *Smith, Trans. Ent. Soc.* ii. new ser. p. 43. t. 8. f. 7 ♀.

Hab. Northern India; North China (Chusan).

68. BOMBUS TRIFASCIATUS.

Bombus trifasciatus, *Smith, Trans. Ent. Soc.* ii. new ser. p. 43. t. 8. f. 4.

Hab. North China (Chusan).

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69. BOMBUS ALIENUS. B.M.

Worker. Length 5 lines.—Face subelongate, the clypeus smooth and shining, strongly punctured at the sides; the pubescence on the head black; that on the thorax anteriorly, posteriorly and on the sides yellow, on the disk between the wings it is black; the wings subhyaline, the anterior margins of the superior pair slightly fulvous, the nervures and tegulæ ferruginous; the femora black, the tibiæ and tarsi ferruginous. Abdomen, the pubescence on the two basal segments yellow, on the third and fourth black, and on the apical segments fulvous.

Hab. North China. (Coll. R. Fortune, Esq.)

70. BOMBUS RUFO-FASCIATUS. B.M.

Bombus rufo-fasciatus, *Smith, Trans. Ent. Soc.* ii. new ser. p. 48 ♀.

Hab. Northern India.

71. BOMBUS ORIENTALIS. B.M.

Female. Length 10 lines.—Black; the head and thorax clothed with black pubescence; the legs have a black pubescence; wings dark fuscous; the two basal segments of the abdomen clothed with a rich yellow pubescence, the third with black, and the apical segments with ferruginous pubescence.

Hab. East Indies.

72. BOMBUS NASUTUS.

Bombus nasutus, *Smith, Trans. Ent. Soc.* ii. new ser. p. 44.

Hab. North China (Chusan).

73. BOMBUS BREVICEPS.

Bombus breviceps, *Smith, Trans. Ent. Soc.* ii. new ser. p. 44.

Hab. North China.

74. BOMBUS HÆMORRHOIDALIS. B.M.

Bombus hæmorrhoidalis, *Smith, Trans. Ent. Soc.* ii. new ser. p. 43.

Hab. Northern India; North China (Chusan).

75. BOMBUS FUNERARIUS. B.M.

Bombus funerarius, *Smith, Trans. Ent. Soc.* ii. new ser. p. 47. t. 8. f. 6 ♀.

Hab. Northern India.

76. BOMBUS FLAVESCENS.

Bombus flavescens, *Smith, Trans. Ent. Soc.* ii. new ser. p. 45 ♂.

Hab. North China (Chusan).

77. BOMBUS FORMOSUS. B.M.

Female. Length 9 lines.—Black; the pubescence on the head and thorax above black, on the sides of the metathorax and beneath the wings it is yellow; the legs black; wings smoky; the basal segment of the abdomen and a broad angular patch on the two following segments, of bright yellow pubescence; that on the second and third segments laterally, is bright ferruginous; the three apical segments covered with black pubescence.

Hab. India.

78. BOMBUS EXIMIUS. B.M.

Bombus eximius, *Smith, Trans. Ent. Soc.* ii. 47. new ser. t. 8. f. 5 ♀.

This species resembles the *B. rufipes* of St. Fargeau; but the type-specimen described by that author is in the collection of J. O. Westwood, Esq., and it differs from the present species in having dark smoky wings, with only the intermediate tarsi, and posterior tibiæ and tarsi ferruginous; in *eximius* all the tibiæ and tarsi are pale, the wings yellow, and the nervures ferruginous.

Hab. Silhet.

79. BOMBUS SIMILIS.

Bombus similis, *Smith, Trans. Ent. Soc.* ii. new ser. p. 48.

Hab. Northern India.

Genus 63. MELIPONA.

Apis, pt., *Fabr. Ent. Syst. Supp.* p. 273 (1798).
Melipona, *Latr. Gen. Cr. et Ins.* iv. 182 (1806-9).
Trigona, pt., *Jurine, Hym.* (1807).

1. MELIPONA FAVOSA. B.M.

Apis favosa, *Fabr. Ent. Syst. Supp.* p. 275. 82.
Latr. Mem. Ann. Mus. v. 175. t. 13. f. 5; iv. t. 69. f. 6, 8 (*type sp. in Coll. Westw.*).
Melipona favosa, *Latr. Gen. Cr. et Ins.* iv. 182, and *Voy. Humb. & Bonp.* p. 289. 1. t. 20. f. 1 ♂.
Klug, Illig. Mag. vi. 226.

Melipona favosa, *St. Farg. Hym.* i. 419. 6.
Trigona favosa, *Jurine, Hym.* p. 246.
Hab. Cayenne; Venezuela.

2. MELIPONA FASCIATA.
Melipona fasciata, *Latr. Voy. Humb. & Bonp.* p. 291.
Hab. Brazil.

3. MELIPONA INTERRUPTA.
Melipona interrupta, *Latr. Voy. Humb. & Bonp.* p. 291. 4. t. 20. f. 3 ♂.
Hab. Brazil; Cayenne.

4. MELIPONA POSTICA.
Melipona postica, *Latr. Voy. Humb. & Bonp.* p. 292. 5. t. 20. f. 4 ♂.
Hab. Brazil.

5. MELIPONA SCUTELLARIS.
Melipona scutellaris, *Latr. Voy. Humb. & Bonp.* p. 290. 2. t. 20. f. 2 ♂.
Hab. Brazil.

6. MELIPONA FULIGINOSA.
Melipona fuliginosa, *St. Farg. Hym.* i. 423. 13.
Hab. Cayenne.

7. MELIPONA MUTATA. B.M.
Melipona mutata, *St. Farg. Hym.* i. 419. 5 (*type sp. in Coll. Westw.*).
Hab. Cayenne.

8. MELIPONA BICOLOR. B.M.
Melipona bicolor, *St. Farg. Hym.* i. 423. 11 (*type sp. in Coll. Westw.*).
Hab. Brazil (Para).

9. MELIPONA ANTHIDIOIDES. B.M.
Melipona anthidioides, *St. Farg. Hym.* i. 417. 3 (*type sp. in Coll. Westw.*).
Hab. Brazil.

10. MELIPONA FULVA.
Melipona fulva, *St. Farg. Hym.* i. 421. 9.
Hab. Brazil.

11. MELIPONA SANT. HILARII.
Melipona Sant. Hilarii, *St. Farg. Hym.* i. 420. 7.
Hab. Brazil.

12. MELIPONA MIXTA.
Melipona mixta, *St. Farg. Hym.* i. 422. 10.
Hab. Brazil.

13. MELIPONA MARGINATA.
Melipona marginata, *St. Farg. Hym.* i. 424. 13.
Hab. Brazil. (Coll. F. Smith.)

14. MELIPONA NIGRA.
Melipona nigra, *St. Farg. Hym.* i. 423. 12.
Hab. Brazil.

15. MELIPONA QUADRIFASCIATA.
Melipona quadrifasciata, *St. Farg. Hym.* i. 416. 1.
Hab. Brazil.

16. MELIPONA QUINQUEFASCIATA.
Melipona quinquefasciata, *St. Farg. Hym.* i. 418. 4.
Hab. Brazil.

17. MELIPONA RUFIVENTRIS.
Melipona rufiventris, *St. Farg. Hym.* i. 421. 8.
Hab. Brazil.

18. MELIPONA VICINA.
Melipona vicina, *St. Farg. Hym.* i. 417. 2.
Hab. Brazil.

19. MELIPONA GRANDIS.
Melipona grandis, *Guér. Icon. Règ. Anim. Ins.* p. 468.
Hab. Bolivia.

20. MELIPONA TESTACEA.

Melipona testacea, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), p. 265.

Hab. Brazil.

21. MELIPONA FULVIPES. B.M.

Melipona fulvipes, *Guér. Icon. Règ. Anim. Ins.* p. 462. t. 75. f. 6, 6½.

Hab. Cuba.

22. MELIPONA COMPRESSIPES.

Apis compressipes, *Fabr. Syst. Piez.* p. 370. 2.
Melipona compressipes, *Schomb. Faun. Flo. Brit. Guiana*, iii. 592.

Hab. Guiana.

23. MELIPONA LATERALIS.

Melipona lateralis, *Schomb. Faun. Flo. Brit. Guiana*, iii. 592.

Hab. Guiana.

24. MELIPONA PALLENS.

Melipona pallens, *Schomb. Faun. Flo. Brit. Guiana*, iii. 592.

Hab. Guiana.

25. MELIPONA FASCICULATA. B.M.

Worker. Length 4½ lines.—Black; the vertex of the head, the thorax and legs have a hoary pubescence; head, the face has a narrow line along the inner orbits of the eyes, a line down the centre of the clypeus, and the labrum, yellow; mandibles ferruginous; the antennæ reddish-yellow in front, above fuscous, the two apical joints entirely reddish-yellow. The thorax has anteriorly on each side before the insertion of the wings a tuft of red pubescence; wings subhyaline, the superior pair having a yellow stain, the tegulæ and nervures pale rufo-testaceous; the legs rufo-testaceous, the tarsi beneath clothed with fulvous pubescence; the apical margins of the segments of the abdomen have a narrow yellow line; the pubescence at the base, apex and beneath hoary, that at the apex intermixed with black hairs.

Hab. Para.

26. MELIPONA FLAVIPENNIS.

Male. Length 5½ lines.—Black, the clypeus, face anteriorly,

labrum and mandibles rufo-testaceous; the flagellum ferruginous beneath; the face is smooth and shining, and has a tuft of sooty-black pubescence above the insertion of the antennæ. Thorax nearly naked on the disk, smooth and shining, having anteriorly at the sides and along the margin of the scutellum a dense fringe of black pubescence; the pubescence on the legs black, except that on the tarsi beneath, which is fulvous; the posterior tarsi beneath, the apical joint of all the tarsi, and the apex of the posterior tibiæ within, ferruginous; the wings bright yellow, palest towards their apical margins, the nervures and tegulæ rufo-testaceous. Abdomen smooth and shining, the apical margins of the segments having a thick fringe of sooty-black pubescence.

Hab. Brazil (Para). (Coll. F. Smith.)

Genus 64. TRIGONA.

Apis, pt., *Fabr. Ent. Syst.* ii. 314 (1793).
Trigona, pt., *Jurine, Hym.* (1807).
Melipona, *Illig. Mag.* v. (1805).

1. TRIGONA AMALTHEA. B.M.

Apis amalthea, *Fabr. Syst. Piez.* p. 371. 8.
Oliv. Ency. Méth. iv. 68.
Latr. Ann. Mus. Hist. Nat. v. 175. 10. t. 13. f. 13 (*type sp. in Coll. Westw.*).
Trigona amalthera, *Gen. Crust. et Ins.* iv. 183.
Jurine, Hym. p. 246.
Melipona amalthea, *St. Farg. Hym.* i. 425. 16.

Hab. Brazil.

2. TRIGONA PALLIDA. B.M.

Apis pallida, *Latr. Ann. Mus. Hist. Nat.* v. 177. t. 13. f. 14.
Trigona pallida, *Latr. Ann. Mus. Hist. Nat.* 177. 12. t. 13. f. 14; *Gen. Crust. et Ins.* iv. 183; *Voy. Humb. & Bonp.* i. 294. 2. t. 20. f. 6 ♂ (*type sp. in Coll. Westw.*).
Melipona pallida, *St. Farg. Hym.* i. 432. 30.
Schomb. Faun. Flo. Brit. Guiana, iii. 592.

Hab. Cayenne; Brazil.

3. TRIGONA COMPRESSA.

Trigona compressa, *Latr. Voy. Humb. & Bonp.* i. 294. 4. t. 20. f. 7 ♂.

Hab. Brazil.

4. Trigona ruficrus. B.M.

Apis ruficrus, *Latr. Ann. Mus. Hist. Nat.* v. p. 176.
Trigona ruficrus, *Latr. Ann. Mus. Hist. Nat.* v. 176. 11; *Gen. Crust. et Ins.* iv. p. 183; *Voy. Humb. & Bonp.* i. 293. 1. t. 20. f. 5 ♂.
Jurine, Hym. p. 246.
Melipona ruficrus, *St. Farg. Hym.* i. 426. 17 (*type sp. in Coll. Westw.*).

Hab. Brazil.

5. Trigona angustula.

Centris pediculana, *Fabr. Syst. Piez.* p. 361. 36?
Melipona angustula, *Illig. Mag.* v. 158 (1806).
Latr. Voy. Humb. & Bonp. i. 295. 5.

Hab. Brazil.

6. Trigona bipunctata.

Melipona bipunctata, *St. Farg. Hym.* i. 427. 20.

Hab. Brazil.

7. Trigona bipartita.

Melipona bipartita, *St. Farg. Hym.* i. 432. 31.

Hab. Brazil.

8. Trigona elongata. B.M.

Melipona elongata, *St. Farg. Hym.* i. 433. 33.

Hab. Brazil.

9. Trigona hyalinata.

Melipona hyalinata, *St. Farg. Hym.* i. 428. 21.

Hab. Brazil.

10. Trigona Iris.

Melipona Iris, *St. Farg. Hym.* ii. 431. 28 (*type sp. in Coll. Westw.*).

Hab. Brazil.

11. Trigona longula.

Melipona longula, *St. Farg. Hym.* i. 434. 34.

Hab. Brazil.

12. TRIGONA LINEATA. B.M.

Melipona lineata, *St. Farg. Hym.* i. 430. 26.

Hab. Brazil.

13. TRIGONA QUADRANGULA.

Melipona quadrangula, *St. Farg. Hym.* i. 433. 35 (*type sp. in Coll. Westw.*).

Hab. Brazil.

14. TRIGONA QUADRIPUNCTATA.

Melipona quadripunctata, *St. Farg. Hym.* i. 430. 27.

Hab. Brazil.

15. TRIGONA VARIA.

Melipona varia, *St. Farg. Hym.* i. 433. 32.

Hab. Brazil.

16. TRIGONA PUNCTATA. B.M.

Worker. Length 2 lines.—Black; head and thorax coarsely punctured, the scape in front, the apical joints of the antennæ and the mandibles ferruginous; the face densely clothed with short golden-yellow pubescence; a line passing over the tegulæ and uniting with a spot on each side of the scutellum, at its base, and the posterior margin of the scutellum, bright yellow; the base of the tibiæ yellow; the legs rufo-testaceous; the coxæ, trochanters and tarsi ferruginous; the wings hyaline at their base, fuscous towards their apex. Abdomen smooth and shining, the apical segments covered with golden-yellow pubescence.

Hab. Brazil (Para).

17. TRIGONA CAPITATA. B.M.

Worker. Length 3 lines.—Black; the head broad, flattened and wider than the thorax; the flagellum obscurely ferruginous, the base of the scape ferruginous. Thorax, a yellow line along the margin of the tegulæ; the wings testaceous, the nervures ferruginous; the legs dark rufo-testaceous, the posterior tibiæ broadly dilated. Abdomen, the margins of the segments membranaceous, the apical segment covered with cinereous pubescence.

Hab. Brazil.

18. TRIGONA LUTEIPES. B.M.

Worker. Length 2½ lines.—Pale testaceous; the face having on each side a large elongate ovate spot, extending from the stemmata to the base of the mandibles; the scape pale testaceous, the flagellum fuscous; the vertex and disk of the thorax have a scattered black pubescence; the wings fuscous; legs yellow, the apex of the basal joint of the posterior tarsi fuscous; the apex of the abdomen fuscous.

Hab. Brazil.

19. TRIGONA GHILIANI.

Trigona Ghiliani, *Spin. Mem. Accad. Torino*, xiii. 92. 75 (1851).

Hab. Para.

20. TRIGONA PELTATA.

Trigona peltata, *Spin. Mem. Accad. Torino*, xiii. 93. 77.

Hab. Para.

21. TRIGONA LURIDA. B.M.

Trigona testacea, *Spin. Mem. Accad. Torino*, xiii. 93. 76 (1851), (nec *Klug*).

Hab. Para.

22. TRIGONA STIGMA.

Worker. Length 3 lines.—Jet-black; head wider than the thorax, the face anteriorly having a silvery pile; the vertex, thorax and legs covered with rigid black pubescence; wings hyaline, iridescent, nervures fuscous, the stigma yellow. Abdomen elongate, narrow, smooth and shining.

Hab. Brazil (Amazons).

23. TRIGONA FEMORATA.

Worker. Length 3½ lines.—Head and thorax black; head wider than the thorax, the clypeus coarsely punctured, the scape ferruginous in front towards the base; the flagellum fulvous in front. Thorax, a pale line passes over the tegulæ, uniting with a pale triangular spot on each side at the base of the scutellum; wings subhyaline, nervures and tegulæ rufo-testaceous; the thorax at the sides and beneath obscurely testaceous and covered with short cinereous pubescence; the femora and abdomen beneath pale rufo-testaceous; abdomen above fuscous, pale testa-

ceous at the base; the posterior tibiæ broadly dilated and having a testaceous stain within; the claws ferruginous.

Hab. Brazil (Amazons).

24. TRIGONA DORSALIS. B.M.

Worker. Length 2 lines.—Head black; the clypeus, a triangular spot above, the face on each side, the scape in front, and the mandibles, yellow; the flagellum testaceous in front. Thorax reddish-yellow, the disk black, encircled with yellow; a dark line beneath the wings and the centre of the metathorax black; legs of a yellow-red, the dilatation of the posterior tibiæ black; wings testaceous. Abdomen subelongate, of reddish-yellow or pale ferruginous.

Hab. Brazil (Para).

25. TRIGONA DIMIDIATA.

Worker. Length 4½ lines.—Jet-black, the face anteriorly having a short silvery pile; the vertex, disk of the thorax and legs clothed with rigid black pubescence, that on the tarsi beneath reddish-brown; the metathorax smooth and shining, pubescent at the sides; the basal half of the wings dark brown, the apical half milky-white. Abdomen elongate, smooth and shining.

Hab. Brazil (Para). (Coll. F. Smith.)

26. TRIGONA LONGIPES. B.M.

Worker. Length 2 lines.—Black; the inner orbits of the eyes, the clypeus and a minute triangular spot above it, the labrum and mandibles, yellow, the base of the latter and the anterior margin of the clypeus fuscous; the scape pale rufo-testaceous, having a fuscous spot at the apex above; the flagellum testaceous beneath. Thorax, the collar, and a narrow line passing over the tegulæ, uniting with a spot on each side at the base of the scutellum, yellow; the scutellum, tegulæ and nervures of the wings pale rufo-testaceous; the wings fusco-hyaline, darkest towards their apex; legs rufo-testaceous, a line on the posterior femora beneath, the apex of the intermediate tibiæ, and the basal joint of the tarsi black; the posterior tibiæ elongate, broadly dilated at their apex, somewhat battledore-shaped, the dilatation black. Abdomen testaceous, fuscous towards the apex.

Hab. Brazil (Para).

27. TRIGONA ZONATA.

Worker. Length 3 lines.—Head and thorax black; a broad

line on each side of the face touching the eyes, and a minute spot between the antennæ yellow, the labrum and mandibles ferruginous; the flagellum fulvous beneath; wings subhyaline, having a fulvous tint towards the base, the nervures testaceous, the stigma yellow; the legs dark rufo-testaceous. Abdomen ferruginous, the margins of the segments having a black band.

Hab. Columbia.

28. TRIGONA BASALIS. B.M.

Worker. Length 3 lines.—The head, thorax, legs, antennæ and basal segment of the abdomen black, the rest of the abdomen ferruginous; the flagellum ferruginous in front, as well as the extreme base of the scape and mandibles, a perpendicular line on the clypeus, and an angular spot on the sides of the face, the tarsi and posterior tibiæ testaceous; sometimes the entire legs rufo-testaceous; the wings hyaline and iridescent, the nervures pale testaceous.

Hab. Brazil; Columbia.

29. TRIGONA D'ORBIGNYI.

Trigona D'Orbignyi, *Guér. Icon. Règ. Anim. Ins.* p. 463.

Hab. Bolivia.

30. TRIGONA ARGENTATA. B.M.

Melipona argentata, *St. Farg. Hym.* i. 428. 22 (*type sp. in Coll. Westw.*).

Hab. S. America.

31. TRIGONA SEXPUNCTATA.

Melipona sexpunctata, *St. Farg. Hym.* i. 431. 29.

Hab. ——?

32. TRIGONA SCUTELLATA. B.M.

Melipona scutellata, *St. Farg. Hym.* i. 426. 17.

Hab. South America.

33. TRIGONA MINUTA.

Melipona minuta, *St. Farg. Hym.* i. 427. 19.

Hab. ——?

34. TRIGONA FERRUGINEA. B.M.

Melipona ferruginea, *St. Farg. Hym.* i. 428. 23.

Hab. Para.

35. TRIGONA MEXICANA.

Trigona Mexicana, *Guér. Icon. Règ. Anim. Ins.* p. 464.

Hab. Mexico.

36. TRIGONA LIGATA.

Trigona ligata, *Say, Bost. Journ. Nat. Hist.* i. 415. 2.

Hab. Mexico.

37. TRIGONA FULVIVENTRIS.

Trigona fulviventris, *Guér. Icon. Règ. Anim. Ins,* p. 464.

Hab. Mexico.

38. TRIGONA BILINEATA.

Trigona bilineata, *Say, Bost. Journ. Nat. Hist.* i. 414. 1.

Hab. Mexico.

39. TRIGONA FUSCATA. B.M.

Melipona fuscata, *St. Farg. Hym.* i. 424. 14 (*type sp. in Coll. Westw.*).

Hab. Peru.

40. TRIGONA VIDUA.

Melipona vidua, *St. Farg. Hym.* i. 429. 24.

Hab. India; Isle of Timor.

41. TRIGONA TESTACEA. B.M.

Trigona testacea, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin* (1807), t. 7. f. 4.

Hab. ——?

42. TRIGONA IRIDIPENNIS. B.M.

Worker. Length 1½ line.—Black; the face clothed with short silvery pubescence; the labrum, mandibles and antennæ pale testaceous. The margins of the thorax and scutellum fringed with fuscous pubescence; the apical joints of the tarsi testaceous, the sides of the metathorax having a silvery pubes-

cence; the wings subhyaline, splendidly iridescent. Abdomen, the base testaceous, very smooth and shining, the extreme apex pale testaceous; beneath pale testaceous, and having a short silvery pubescence.

Hab. Ceylon.

43. TRIGONA NEBULATA. B.M.

Worker. Length 2½ lines.—Black; the clypeus, a triangular spot above it, the anterior angles of the face, the scape in front, the labrum and mandibles yellow. Thorax, a narrow yellow line passing from the collar on each side to the lateral angles of the scutellum; the coxæ and trochanters yellow, the apical joints of the tarsi ferruginous; the pubescence of the legs black; the wings fusco-hyaline, and having a dark fuscous cloud beyond the stigma. Abdomen, the two basal segments red, their apical margins having a narrow black transverse line, the third and following segments black.

Hab. Western Africa.

44. TRIGONA CARBONARIA. B.M.

Worker. Length 1¾ line.—Jet-black; the face covered with a short hoary pubescence, the base of the antennæ and tips of the mandibles pale rufo-testaceous. The thorax shining, the scutellum fringed with pale pubescence, the collar and thorax anteriorly covered with pale pubescence; the sides of the metathorax covered with short white pubescence, naked and very smooth and shining; the wings hyaline, the nervures black; the legs obscurely testaceous. Abdomen naked and glossy black.

Hab. Australia.

Genus 65. APIS.

Apis, Auctorum.

1. APIS MELLIFICA. B.M.

Apis mellifica, *Linn. Faun. Suec.* 1697.
Scop. Ent. Carn. p. 811.
Fabr. Syst. Ent. p. 383. 30.
Sulz. Ins. t. 19. f. 123.
Harris, Expos. Eng. Ins. t. 39. f. 9, 10.
Schrank, Ins. Aust. p. 813.
Rossi, Faun. Etrus. ii. 103. 912.
Christ. Hym. 73. t. 1. f. 1 ♂, t. 2. f. 5 ♀, t. 3. f. 1 ♂.
Don. Brit. Ins. xiv. 63. t. 492.

Apis mellifica, *Kirby, Mon. Ap. Angl.* ii. 312. 73. t. 17. f. 10, 11, 12.
Panz. Faun. Germ. 85. 16 ♂, t. 17 ♀, t. 18 ♂.
Latr. Hist. Nat. xiv. 66. 1; *Ann. Mus. Hist. Nat.* v. 167. t. 13. f. 1, 2, 3; *Voy. Humb. & Bonp.* i. 287. 1. t. 19. 1 ♂, 2 ♀, 3 ♂.
Spin. Ins. Lig. i. 35. 15.
Jurine, Hym. p. 244. t. 12. gen. 35 ♀.
Curtis, Brit. Ent. xvi. t. 769 ♂, ♀, ♂.
Brullé, Expéd. Sc. de Morée, iii. 327. 728.
St. Farg. Hym. i. 401. 1.
Lucas, Explo. Sc. Algér. iii. 141. 1.
Nyland. Ap. Boreal. p. 226. 1.
Spin. Faun. Chili. vi. 161. 1.
Apis cerifera, *Scop. Ann. Hist. Nat.* iv. 16. 16.
Apis gregaria, *Geoffr. Ins.* ii. 407. 1.
Apis domestica, *Ray, Hist. Ins.* p. 240.
Reaum. Ins. v. t. 22. f. 1 ♂, f. 2 ♂, f. 4 ♀, t. 25. f. 1 ♂, f. 10 ♂, f. 16, 17 ♀.
Swamm. Bibl. Nat. t. 17. f. 1, 2 ♂, f. 3 ♀, f. 4 ♂.
Hab. Britain; France; Italy; Albania; Africa; Sandwich Islands; S. America; Jamaica; New Holland.

2. Apis Ligustica.

Apis Ligustica, *Spin. Ins. Lig.* i. fasc. 1. p. 35. 15.
Latr. Ann. Mus. Hist. Nat. v. 172. 7. t. 13. f. 10; *Gen. Crust. et Ins.* iv. 182.
Voy. Humb. & Bonp. i. 287. t. 19. f. 4 ♂, 5 ♀, 6 ♂.
St. Farg. Hym. i. 402. 3.
Hab. Italy; France.

3. Apis socialis. B.M.

Apis socialis, *Latr. Voy. Humb. & Bonp.* i. 288. 8. t. 19. f. 9 ♂.
St. Farg. Hym. i. 404. 8 (*type sp. in Coll. Westw.*).
Hab. India (Bengal); Java; Malabar.

4. Apis Adansonii. B.M.

Apis Adansonii, *Latr. Ann. Mus. Hist. Nat.* v. 172. 6; *Voy. Humb. & Bonp.* i. 288. 7.
Guér. Icon. Règ. Anim. Ins. p. 459. t. 75. f. 4.
Hab. Senegal.

5. Apis dorsata. B.M.

Apis dorsata, *Fabr. Ent. Syst.* ii. 328. 64; *Syst. Piez.* p. 370. 7.
St. Farg. Hym. i. 405. 9.

Apis nigripennis, *Latr. Ann. Mus. Hist. Nat.* v. 170. 4. t. 13. f. 7. (*type sp. in Coll. Westw.*).
Apis bicolor, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin*, 1807, p. 264. t. 7. f. 3.

Hab. India.

6. APIS DELESSERTII.

Apis Delessertii, *Guér. Icon. Règ. Anim. Ins.* p. 461.

Hab. India (Pondicherry).

7. APIS INDICA. B.M.

Apis Indica, *Fabr. Ent. Syst. Supp.* p. 274. 59; *Syst. Piez.* p. 370. 4.
Latr. Ann. Mus. Hist. Nat. iv. 390. 1. t. 69. f. 1, 2, 3; v. 169. 3. t. 13. f. 5; *Voy. Humb. & Bonp.* i. 287. 4. t. 19. f. 10 ♂.
St. Farg. Hym. i. 403. 5 (*type sp. in Coll. Westw.*).

Hab. India.

8. APIS PERROTTETII. B.M.

Apis Perrottetii, *Guér. Icon. Règ. Anim. Ins.* p. 461.

Hab. India.

9. APIS PERONII. B.M.

Apis Peronii, *Latr. Ann. Mus. Hist. Nat.* v. 173. 8. t. 13. f. 11; *Voy. Humb. & Bonp.* i. 289. 9. t. 19. f. 12 ♂.
St. Farg. Hym. ii 405. 10.

Hab. India; Isle of Timor.

10. APIS LOBATA.

Male. Length 4½ lines.—Black; the head, thorax and basal segment densely clothed with cinereous pubescence; wings hyaline, iridescent, the nervures testaceous; legs rufo-testaceous, the posterior tarsi having an elongate lobe produced at the base beneath; the joints densely pubescent beneath.

Hab. India.

11. APIS FASCIATA. B.M.

Apis fasciata, *Latr. Ann. Mus. Hist. Nat.* v. 171. 5. t. 13. f. 9; *Voy. Humb. & Bonp.* i. 288. 6. t. 19. f. 7 ♂.
St. Farg. Hym. i. 406. 11.

Hab. Egypt.

12. APIS UNICOLOR.

Apis unicolor, *Latr. Ann. Mus. Hist. Nat.* v. 168. 2. t. 13. f. 4; *Voy. Humb. & Bonp.* i. 287. 3. t. 19. f. 8 ♂.
" *St. Farg. Hym.* i. 403. 4.

Hab. Isle of Bourbon; Madagascar.

13. APIS NIGRITARUM.

Apis nigritarum, *St. Farg. Hym.* i. 406. 12.

Hab. Congo.

14. APIS SCUTELLATA. B.M.

Apis scutellata, *St. Farg. Hym.* i. 404. 7.

Hab. Africa.

15. APIS CAFFRA.

Apis Caffra, *St. Farg. Hym.* i. 402. 2.

Hab. Africa.

APPENDIX.

20. COLLETES HYLÆIFORMIS. Page 1.

Colletes hylæiformis, *Eversm. Bull. Mosc.* xxv. 45. 1 (1852).

Hab. Russia.

21. COLLETES FLORALIS.

Colletes floralis, *Eversm. Bull. Mosc.* xxv. 46. 4 (1852).

Hab. Russia.

22. COLLETES JUVENCULA.

Colletes juvencula, *Eversm. Bull. Mosc.* xxv. 46. 5 (1852).

Hab. Russia.

23. COLLETES CHILENSIS.

Colletes Chilensis, *Spin. Faun. Chili.* vi. 220. 1.

Hab. Chili.

24. COLLETES NIGROVENTRIS.

Colletes nigroventris, *Spin. Faun. Chili.* vi. 221. 2.
Hab. Chili.

25. COLLETES TETRA.

Colletes tetra, *Spin. Faun. Chili.* vi. 221. 3.
Hab. Chili.

26. COLLETES SEMI-CYANEA.

Colletes semi-cyanea, *Spin. Faun. Chili.* vi. 221. 4.
Hab. Chili.

27. COLLETES ALBOPILOSA.

Colletes albopilosa, *Spin. Faun. Chili.* vi. 222. 5.
Hab. Chili.

28. COLLETES COGNATA.

Colletes cognata, *Spin. Faun. Chili.* vi. 223. 7.
Hab. Chili.

29. COLLETES FULVIPES.

Colletes fulvipes, *Spin. Faun. Chili.* vi. 225. 11.
Hab. Chili.

30. COLLETES SEMI-NITIDA.

Colletes semi-nitida, *Spin. Faun. Chili.* vi. 225. 12.
Hab. Chili.

31. COLLETES ATRIPES.

Colletes dimidiata, *Spin. Faun. Chili.* vi. 225. 10 (nec *Brullé, Hist. Nat. Il. Canar.*).
Hab. Chili.

COLLETES FODIENS.

Melitta fodiens, *Kirby, Mon. Ap. Angl.* ii. 34. 2.
Colletes fodiens, *Eversm. Bull. Mosc.* xxv. 46. 2 (1852).
Hab. Russia.

COLLETES SUCCINCTA.

Apis succincta, *Linn. Syst. Nat.* i. 955. 18.
Colletes succincta, *Eversm. Bull. Mosc.* xxv. 46. 3 (1852).
Hab. Russia.

COLLETES MARGINATA.

Colletes occidentalis, *Halid. Linn. Trans.* (1837) xvii. 322?
Colletes marginata, *Spin. Faun. Chili.* vi. 223. 6.
Hab. Chili.

COLLETES HIRTA.

Colletes hirta, *St. Farg. Hym.* ii. 296.
Spin. Faun. Chili. vi. 224. 8.
Hab. Chili.

COLLETES CYANESCENS.

Andrena cyanescens, *Halid. Trans. Linn. Soc.* (1837) xvii. 322.
Colletes cyaniventris, *Spin. Faun. Chili.* vi. 224. 9.
Hab. Chili.

Genus PASIPHAË.

Pasiphaë, *Spin. Faun. Chili.* vi. 226.

The ocelli placed in a triangle on the vertex; the antennæ filiform; the superior wings with one marginal and two submarginal cells; the marginal cell elongate and acute at the apex; the second submarginal cell obliquely quadrate, receiving both the recurrent nervures. The maxillary palpi 6-jointed; the labial palpi 4-jointed, the basal joint longer than the three following, much thicker, broadest at the base; the labrum obtuse at the apex, which is emarginate.

1. PASIPHAË CÆRULESCENS.

Pasiphaë cærulescens, *Spin. Faun. Chili.* vi. 228. 1. t. 1. f. 4.
Hab. Chili.

2. PASIPHAË FLAVICORNIS.

Pasiphaë flavicornis, *Spin. Faun. Chili.* vi. 228. 2.
Hab. Chili.

3. PASIPHAË RUFIVENTRIS.

Pasiphaë rufiventris, *Spin. Faun. Chili.* vi. 229. 3.
Hab. Chili.

4. PASIPHAË TRISTIS.

Pasiphaë tristis, *Spin. Faun. Chili.* vi. 230. 4.
Hab. Chili.

Genus CAUPOLICANA.

Caupolicana, *Spin. Faun. Chili.* vi. 212.

The superior wings with one marginal and three submarginal cells. The maxillary palpi 6-jointed, the labial palpi 4-jointed; the labium transverse at the apex, produced laterally into elongate acute points, the margins of the apex ciliated; the paraglossæ as long as the palpi.

This genus is closely allied to *Lamprocolletes* of this Catalogue.

1. CAUPOLICANA GAYI.

Caupolicana Gayi, *Spin. Faun. Chili.* vi. 215. 1. t. 1. f. 2 ♀.

Hab. Chili.

2. CAUPOLICANA FULVICOLLIS.

Caupolicana fulvicollis, *Spin. Faun. Chili.* vi. 216. 2 ♀.

Hab. Chili.

3. CAUPOLICANA HIRSUTA.

Caupolicana hirsuta, *Spin. Faun. Chili.* vi. 216. 3.

Hab. Chili.

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50. PROSOPIS PATELLATA. Page 31.

Prosopis patellata, *Eversm. Bull. Mosc.* xxv. 52. 2.

Hab. Russia.

51. PROSOPIS DISTANS.

Prosopis distans, *Eversm. Bull. Mosc.* xxv. 54. 9 (1852).

Hab. Russia.

52. PROSOPIS LÆVIGATA. B.M.

Female. Length 3½ lines.—Black; head and thorax subopake, very delicately punctured; the head subovate, the face having on each side of the clypeus an angular yellow spot; the anterior margin of the clypeus slightly emarginate. Thorax, the tubercles and an interrupted line on the collar, yellow; the metathorax smooth and rounded; the wings subhyaline and beautifully iridescent; the legs entirely black. Abdomen elongate, sublanceolate, very smooth and shining, having a few black hairs towards the apex.

Hab. New Zealand.

PROSOPIS VARIEGATA.

Prosopis variegata, *Fabr. Syst. Piez.* p. 295. 9.
Eversm. Bull. Mosc. xxv. 51. 1.

Hab. Russia.

PROSOPIS DIFFORMIS.

Prosopis difformis, *H. Schäff. Nom. Entom.* p. 201.
Eversm. Bull. Mosc. xxv. 52. 3.

Hab. Russia.

PROSOPIS SIGNATA.

Sphex signata, *Panz. Faun. Germ.* p. 53. 2.
Prosopis bipunctata, *Eversm. Bull. Mosc.* xxv. 52. 4 (1852).

Hab. Russia.

PROSOPIS LÆVIGATA.

Prosopis lævigata, *H. Schäff. Nom. Ent.* p. 201.
Eversm. Bull. Mosc. xxv. 53. 5 (1852).

Hab. Russia.

PROSOPIS INFLEXA.

Prosopis inflexa, *H. Schäff. Nom. Ent.* p. 201.
Prosopis ciliata, *Eversm. Bull. Mosc.* xxv. 53. 6, and *Mus. Berl. MSS.* (1852).

Hab. Russia.

PROSOPIS ANNULATA.

Apis annulata, *Linn. Faun. Suec.* 1706.
Prosopis annulata, *Eversm. Bull. Mosc.* xxv. 53. 7 (1852).

Hab. Russia.

PROSOPIS ANNULARIS.

Sphex annulata, *Panz. Faun. Germ.* p. 53. 1.
Prosopis annularis, *Eversm. Bull. Mosc.* xxv. 54. 8 (1852).

Hab. Russia.

PROSOPIS PERPLEXA. B.M.

Prosopis confusa, *Smith, Cat. Hym. Ins.* pt. 1. p. 30. 45 (nec confusa, *Nyland.*).

Hab. New Holland.

Genus CHILICOLA.

Chilicola, *Spin. Faun. Chili.* vi. 210.

The superior wings with one marginal and two submarginal cells; the second submarginal cell narrowed towards the marginal; the first recurrent nervure uniting with the first transverse cubital nervure; the second recurrent nervure entering the second submarginal near its apex. The posterior legs have the outer spur serrated within.

1. CHILICOLA RUBRIVENTRIS.

Chilicola rubriventris, *Spin. Faun. Chili.* vi. 211. 1. t. 1. f. 5 ♀.
Hab. Chili.

2. CHILICOLA PLEBEIA.

Chilicola plebeia, *Spin. Faun. Chili.* vi. 211. 2.
Hab. Chili.

3. CHILICOLA LONGITARSA.

Chilicola longitarsa, *Spin. Faun. Chili.* vi. 212. 3.
Hab. Chili.

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18. SPHECODES CHILENSIS. Page 38.

Sphecodes Chilensis, *Spin. Faun. Chili.* vi. 231. 1.
Hab. Chili.

SPHECODES FUSCIPENNIS.

Dichroa fuscipennis, *Germ. Faun. Ins. Europ.* fasc. 5. t. 18.
Eversm. Bull. Mosc. xxv. 48. 1.
Hab. Russia.

SPHECODES RUFESCENS.

Apis rufescens, *Fourc. Ent. Par.* ii. 447. 17.
Dichroa analis, *Eversm. Bull. Mosc.* xxv. 48. 2 (1852).
Hab. Russia.

SPHECODES GIBBUS.

Sphex gibba, *Linn. Syst. Nat.* i. 946. 33 ♀.
Dichroa monilicornis, *Eversm. Bull. Mosc.* xxv. 49. 3 (1852).
Hab. Russia.

SPHECODES GEOFFRELLUS.

Melitta Geoffrella, *Kirby, Mon. Ap. Angl.* ii. 45. 8.
Dichroa Geoffrella, *Eversm. Bull. Mosc.* ii. 49. 4 (1852).
Hab. Russia.

SPHECODES AFRICANUS. B.M.

Sphecodes Africanus, *St. Farg. Hym.* ii. 541. 1.
Lucas, Explo. Sc. Algér. iii. 222. t. 10. f. 9.
Hab. Algeria (Oran).

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116. HALICTUS BRUNNESCENS. Page 73.

Hylæus brunnescens, *Eversm. Bull. Mosc.* xxv. 36. 2 (1852).
Hab. Russia.

117. HALICTUS TOMENTOSUS.

Hylæus tomentosus, *Eversm. Bull. Mosc.* xxv. 37. 5 (1852).
Hab. Russia.

118. HALICTUS SENILIS.

Hylæus senilis, *Eversm. Bull. Mosc.* xxv. 38. 8 (1852).
Hab. Russia.

119. HALICTUS ROSTRATUS.

Hylæus rostratus, *Eversm. Bull. Mosc.* xxv. 38. 9 (1852).
Hab. Russia.

120. HALICTUS FULVICRUS.

Hylæus fulvicrus, *Eversm. Bull. Mosc.* xxv. 39. 12.
Hab. Russia.

121. HALICTUS RUBENS.

Halictus rubellus, *Eversm. Bull. Mosc.* xxv. 40. 15 (nec *Halid.*) (1852).
Hab. Russia.

122. HALICTUS MUCOREUS.

Hylæus mucoreus, *Eversm. Bull. Mosc.* xxv. 44. 25 (1852).
Hab. Russia.

123. HALICTUS CHILIENSIS.
Halictus Chiliensis, *Spin. Faun. Chili.* vi. 201. 1.
Hab. Chili.

124. HALICTUS CHLORIS.
Halictus chloris, *Spin. Faun. Chili.* vi. 202. 2.
Hab. Chili.

125. HALICTUS NIGRO-MARGINATUS.
Halictus nigro-marginatus, *Spin. Faun. Chili.* vi. 203. 3.
Hab. Chili.

126. HALICTUS NIGRO-CÆRULEUS.
Halictus nigro-cæruleus, *Spin. Faun. Chili.* vi. 204. 4.
Hab. Chili.

127. HALICTUS PROXIMUS.
Halictus proximus, *Spin. Faun. Chili.* vi. 204. 5.
Hab. Chili.

128. HALICTUS MUTABILIS.
Halictus mutabilis, *Spin. Faun. Chili.* vi. 205. 6.
Hab. Chili.

129. HALICTUS EMARGINATUS.
Halictus emarginatus, *Spin. Faun. Chili.* vi. 206. 7.
Hab. Chili.

130. HALICTUS CORINOGASTER.
Halictus corinogaster, *Spin. Faun. Chili.* vi. 206. 8.
Hab. Chili.

131. HALICTUS GAYI.
Halictus Gayi, *Spin. Faun. Chili.* vi. 208. 10.
Hab. Chili.

132. HALICTUS POSTICUS.
Halictus posticus, *Spin. Faun. Chili.* vi. 208. 11.
Hab. Chili.

133. HALICTUS GAYATINUS.

Halictus Gayatinus, *Spin. Faun. Chili.* vi. 209. 12.

Hab. Chili.

HALICTUS QUADRICINCTUS.

Halictus quadricinctus, *Smith, Zool.* vi. 2040. 1.
Hylæus quadricinctus, *Eversm. Bull. Mosc.* xxv. 35. 1 (1852).

Hab. Russia.

HALICTUS SEXCINCTUS.

Halictus sexcinctus, *Latr. Hist. Nat. Cr. et Ins.* xiii. 366. 2.
Hylæus arbustorum, *Eversm. Bull. Mosc.* xxv. 36. 3 (1852).

Hab. Russia.

HALICTUS RUBICUNDUS.

Apis rubicundus, *Christ. Hym.* p. 190.
Hylæus rubicundus, *Eversm. Bull. Mosc.* xxv. 36. 4 (1852).

Hab. Russia.

HALICTUS FULVIPES.

Halictus fulvipes, *Germ. Faun. Ins. Europ.* fasc. 7. 15.
Hylæus fulvipes, *Eversm. Bull. Mosc.* xxv. 37. 6 (1852).

Hab. Russia.

HALICTUS INTERRUPTUS.

Hylæus interruptus, *Panz. Faun. Germ.* 55. 4.
Eversm. Bull. Mosc. xxv. 37. 7 (1852).

Hab. Russia.

HALICTUS SEXNOTATUS.

Melitta sexnotata, *Kirby, Mon. Ap. Angl.* ii. 82. 37.
Hylæus sexnotatus, *Eversm. Bull. Mosc.* xxv. 38. 10 (1852).

Hab. Russia.

HALICTUS LEUCOZONIUS.

Melitta leucozonia, *Kirby, Mon. Ap. Angl.* ii. 76. 33.
Hylæus leucozonius, *Eversm. Bull. Mosc.* xxv. 39. 11.

Hab. Russia.

HALICTUS LUGUBRIS.

Melitta lugubris, *Kirby, Mon. Ap. Angl.* ii. 31. 86 ♂.

Melitta lævigata, *Kirby, Mon. Ap. Angl.* ii. 75. 32 ♀.
Hylæus lævigatus, *Eversm. Bull. Mosc.* xxv. 40. 13.
Hylæus lugubris, *Eversm. Bull. Mosc.* xxv. 40. 14.
Hab. Russia.

HALICTUS ABDOMINALIS.

Hylæus abdominalis, *Panz. Faun. Germ.* 53. 18.
Eversm. Bull. Mosc. xxv. 40. 16 (1852).
Hab. Russia.

HALICTUS ALBIPES.

Hylæus albipes, *Fabr. Ent. Syst.* ii. 306. 13.
Eversm. Bull. Mosc. xxv. 41. 17 (1852).
Hab. Russia.

HALICTUS FULVICORNIS.

Melitta fulvicornis, *Kirby, Mon. Ap. Angl.* ii. 67. 27.
Hylæus fulvicornis, *Eversm. Bull. Mosc.* xxv. 42. 18 (1852).
Hab. Russia.

HALICTUS NITIDIUSCULUS.

Melitta nitidiuscula, *Kirby, Mon. Ap. Angl.* ii. 64. 23.
Hylæus nitidiusculus, *Eversm. Bull. Mosc.* xxv. 42. 19 (1852).
Hab. Russia.

HALICTUS MINUTISSIMUS.

Melitta minutissima, *Kirby, Mon. Ap. Angl.* p. 63. 22.
Hylæus minutissimus, *Eversm. Bull. Mosc.* xxv. 42. 20 (1852).
Hab. Russia.

HALICTUS ÆRATUS.

Melitta ærata, *Kirby, Mon. Ap. Angl.* ii. 58. 17.
Hylæus ærata, *Eversm. Bull. Mosc.* xxv. 43. 21 (1852).
Hab. Russia.

HALICTUS SMEATHMANELLUS.

Melitta Smeathmanella, *Kirby, Mon. Ap. Angl.* ii. *App.* 375. 111.
Hylæus Smeathmanellus, *Eversm. Bull. Mosc.* xxv. 43. 22 (1852).
Hab. Russia.

HALICTUS FLAVIPES.

Melitta flavipes ♂, M. seladonia ♀, *Kirby, Mon. Ap. Angl.* ii. 55. 15, & 57. 16.
Hylæus flavipes et H. seladonia, *Eversm. Bull. Mosc.* xxv. 43. 23, & 44. 24.

Hab. Russia.

HALICTUS MINUTUS.

Halictus minutus, *St. Farg. Hym.* ii. 277. 17?
Spin. Faun. Chili. vi. 207. 9.

Hab. Chili; France?

NOMIA DIFFORMIS. Page 88.

Lasius difformis, *Panz. Faun. Germ.* 89. 15.
Nomia difformis, *Eversm. Bull. Mosc.* xxv. 58. 1 (1852).

Hab. Russia.

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150. ANDRENA FUSCOSA. Page 118.

Andrena fuscosa, *Eversm. Bull. Mosc.* xxv. 11. 1 (1825).

Hab. Russia.

151. ANDRENA COMTA.

Andrena comta, *Eversm. Bull. Mosc.* xxv. 12. 4 (1852).

Hab. Russia.

152. ANDRENA OVINA.

Andrena ovina, *Eversm. Bull. Mosc.* xxv. 12. 6 (1852).

Hab. Russia.

153. ANDRENA CUNICULARIA.

Andrena cunicularia, *Eversm. Bull. Mosc.* xxv. 13. 9 (1852).

Hab. Russia.

154. ANDRENA FULVITARSIS.

Andrena fulvitarsis, *Eversm. Bull. Mosc.* xxv. 14. 12 (1852).

Hab. Russia.

155. ANDRENA LIMBATA.
Andrena limbata, *Eversm. Bull. Mosc.* xxv. 14. 13 (1852).
Hab. Russia.

156. ANDRENA ABERRANS.
Andrena aberrans, *Eversm. Bull. Mosc.* xxv. 15. 14 (1852).
Hab. Russia.

157. ANDRENA AMBIGUA.
Andrena ambigua, *Eversm. Bull. Mosc.* xxv. 16. 17 (1852).
Hab. Russia.

158. ANDRENA HIRTICEPS.
Andrena hirticeps, *Eversm. Bull. Mosc.* xxv. 17. 20 (1852).
Hab. Russia.

159. ANDRENA LONGULA.
Andrena longula, *Eversm. Bull. Mosc.* xxv. 17. 21 (1852).
Hab. Russia.

160. ANDRENA XANTHOTHORAX.
Andrena xanthothorax, *Eversm. Bull. Mosc.* xxv. 18. 24 (1852).
Hab. Russia.

161. ANDRENA BREVITARSIS.
Andrena brevitarsis, *Eversm. Bull. Mosc.* xxv. 18. 25 (1852).
Hab. Russia.

162. ANDRENA FALLAX.
Andrena fallax, *Eversm. Bull. Mosc.* xxv. 20. 29 (1852).
Hab. Russia.

163. ANDRENA CAMPESTRIS.
Andrena campestris, *Eversm. Bull. Mosc.* xxv. 20. 31 (1852).
Hab. Russia.

164. ANDRENA MICROSTIGMA.
Andrena microstigma, *Eversm. Bull. Mosc.* xxv. 21. 32 (1852).
Hab. Russia.

165. ANDRENA SENILIS.
Andrena senilis, *Eversm. Bull. Mosc.* xxv. 21. 34 (1852).
Hab. Russia.

166. ANDRENA FLORICOLA.
Andrena floricola, *Eversm. Bull. Mosc.* xxv. 22. 35 (1853).
Hab. Russia.

167. ANDRENA LABROSA.
Andrena labrosa, *Eversm. Bull. Mosc.* xxv. 22. 36 (1852).
Hab. Russia.

168. ANDRENA FLORIVAGA.
Andrena florivaga, *Eversm. Bull. Mosc.* xxv. 23. 38 (1852).
Hab. Russia.

169. ANDRENA GRACILIS.
Andrena gracilis, *Eversm. Bull. Mosc.* xxv. 25. 44 (1852).
Hab. Russia.

170. ANDRENA TRICINCTA.
Andrena tricincta, *Eversm. Bull. Mosc.* xxv. 25. 46 (1852).
Hab. Russia.

171. ANDRENA QUADRICINCTA.
Andrena quadricincta, *Eversm. Bull. Mosc.* xxv. 26. 48 (1852).
Hab. Russia.

172. ANDRENA SENEX.
Andrena senex, *Eversm. Bull. Mosc.* xxv. 27. 50 (1852).
Hab. Russia.

173. ANDRENA INCERTA.
Andrena incerta, *Eversm. Bull. Mosc.* xxv. 27. 51 (1852).
Hab. Russia.

174. ANDRENA NIGRIFRONS.
Andrena nigrifrons, *Eversm. Bull. Mosc.* xxv. 27. 52 (1852).
Hab. Russia.

175. ANDRENA GRAVIDA.

Andrena gravida, *Eversm. Bull. Mosc.* xxv. 28. 54 (1852).
Hab. Russia.

176. ANDRENA SCITA.

Andrena scita, *Eversm. Bull. Mosc.* xxv. 28. 55 (1852).
Hab. Russia.

177. ANDRENA STRANGULATA.

Andrena strangulata, *Eversm. Bull. Mosc.* xxv. 29. 57 (1852).
Hab. Russia.

178. ANDRENA CONSOBRINA.

Andrena consobrina, *Eversm. Bull. Mosc.* xxv. 30. 60 (1852).
Hab. Russia.

179. ANDRENA ZONALIS.

Andrena zonalis, *Eversm. Bull. Mosc.* xxv. 31. 61 (1852).
Hab. Russia.

180. ANDRENA RUFIVENTRIS.

Andrena rufiventris, *Eversm. Bull. Mosc.* xxv. 32. 64 (1852).
Hab. Russia.

ANDRENA PILIPES.

Andrena pilipes, *Fabr. Mant.* p. 298. 13.
Eversm. Bull. Mosc. xxv. 11. 2 (1852).
Hab. Russia.

ANDRENA FUNEBRIS.

Andrena funebris, *Panz. Faun. Germ.* p. 64. 5.
Eversm. Bull. Mosc. xxv. 11. 3 (1852).
Hab. Russia.

ANDRENA CINERARIA.

Andrena cineraria, *Linn. Syst. Nat.* i. 953. 5.
Eversm. Bull. Mosc. xxv. 12. 5 (1852).
Hab. Russia.

ANDRENA THORACICA.

Andrena thoracica, *Fabr. Syst. Piez.* p. 322. 3.
Eversm. Bull. Mosc. xxv. 13. 7 (1852).

Hab. Russia.

ANDRENA GWYNANA.

Melitta Gwynana, *Kirby, Mon. Ap. Angl.* ii. 120. 60.
Andrena Gwynana, *Eversm. Bull. Mosc.* xxv. 13. 8 (1852).

Hab. Russia.

ANDRENA TRIMMERANA.

Melitta Trimmerana, *Kirby, Mon. Ap. Angl.* ii. 116. 57.
Eversm. Bull. Mosc. xxv. 14. 10.

Hab. Russia.

ANDRENA NIGRO-ÆNEA.

Melitta nigro-ænea, *Kirby, Mon. Ap. Angl.* ii. 109. 54.
Andrena nigro-ænea, *Eversm. Bull. Mosc.* xxv. 14. 11 (1852).

Hab. Russia.

ANDRENA VARIANS.

Apis varians, *Rossi, Mant.* p. 317.
Andrena varians, *Eversm. Bull. Mosc.* xxv. 15. 15 (1852).

Hab. Russia.

ANDRENA FUSCIPES.

Melitta fuscipes, *Kirby, Mon. Ap. Angl.* ii. 136. 75.
Andrena fuscipes, *Eversm. Bull. Mosc.* xxv. 15. 16 (1852).

Hab. Russia.

ANDRENA BARBATULA.

Andrena barbatula, *Eversm. Bull. Mosc.* xxv. 16. 18 (nec *Kirby*), (1852).
Zett. Ins. Lapp. p. 461. 5?

Hab. Russia.

ANDRENA ALBICRUS.

Andrena albicrus, *Smith, Zool.* v. 1924. 59 ♂.
Andrena barbilabrus, *Eversm. Bull. Mosc.* xxv. 16. 19 ♂.

Hab. Russia.

ANDRENA ARMATA.

Andrena armata, *Eversm. Bull. Mosc.* xxv. 17. 22 (1852).
Andrena helvola, *Linn.* ♂? *nec* armata, *Kirby*.
Hab. Russia.

ANDRENA ALBICANS.

Melitta albicans, *Kirby, Mon. Ap. Angl.* ii. 94. 45.
Andrena albicans, *Eversm. Bull. Mosc.* xxv. 18. 23 (1852).
Hab. Russia.

ANDRENA ANALIS.

Andrena analis, *Panz. Faun. Germ.* 90. 14.
Eversm. Bull. Mosc. xxv. 19. 26? (1852).
Hab. Russia.

ANDRENA COITANA.

Melitta Coitana, *Kirby, Mon. Ap. Angl.* ii. 147. 86.
Eversm. Bull. Mosc. xxv. 19. 27.
Hab. Russia.

ANDRENA LABIALIS.

Melitta labialis, *Kirby, Mon. Ap. Angl.* ii. 148. 87.
Andrena labialis, *Eversm. Bull. Mosc.* xxv. 20. 28 (1852).
Hab. Russia.

ANDRENA PILOSULA.

Melitta pilosula, *Kirby, Mon. Ap. Angl.* ii. 164. 104.
Eversm. Bull. Mosc. xxv. 20. 30.
Hab. Russia.

ANDRENA MINUTULA.

Melitta minutula, *Kirby, Mon. Ap. Angl.* ii. 161. 101.
Eversm. Bull. Mosc. xxv. 21. 33 (1852).
Hab. Russia.

ANDRENA DENTICULATA.

Melitta denticulata, *Kirby, Mon. Ap. Angl.* ii. 133. 72.
Andrena denticulata, *Eversm. Bull. Mosc.* xxv. 22. 37 (1852).
Hab. Russia.

ANDRENA COLLINSONANA.

Melitta Collinsonana, *Kirby, Mon. Ap. Angl.* ii. 153. 93 ♂.
Melitta proxima, *Kirby, Mon. Ap. Angl.* ii. 146. 85 ♀.
Andrena proxima, *Eversm. Bull. Mosc.* xxv. 23. 39 (1852).

Hab. Russia.

ANDRENA INTERRUPTA.

Andrena interrupta, *H. Schäff. Nom. Ent.* p. 66.
Eversm. Bull. Mosc. xxv. 23. 40 (1852).

Hab. Russia.

ANDRENA CINERASCENS.

Andrena cinerascens, *H. Schäff. Nom. Ent.* p. 65.
Eversm. Bull. Mosc. xxv. 24. 41.

Hab. Russia.

ANDRENA CANDENS.

Andrena candens, *H. Schäff. Nom. Ent.* p. 65.
Eversm. Bull. Mosc. xxv. 24. 42 (1852).

Hab. Russia.

ANDRENA INCISA.

Andrena incisa, *H. Schäff. Nom. Ent.* p. 66.
Eversm. Bull. Mosc. xxv. 24. 43 (1852).

Hab. Russia.

ANDRENA LISTERELLA.

Melitta Listerella, *Kirby, Mon. Ap. Angl.* ii. 137. 76 ♀.
Andrena Listerella, *Eversm. Bull. Mosc.* xxv. 25. 45 (1852).

Hab. Russia.

ANDRENA FULVICRUS.

Melitta fulvicrus, *Kirby, Mon. Ap. Angl.* ii. 138. 77.
Eversm. Bull. Mosc. 25. 47 (1852).

Hab. Russia.

ANDRENA SMITHELLA.

Melitta Smithella, *Kirby, Mon. Ap. Angl.* ii. 131. 70.
Andrena Smithella, *Eversm. Bull. Mosc.* xxv. 26. 49.

Hab. Russia.

ANDRENA AFZELIELLA.

Melitta Afzeliella, *Kirby, Mon. Ap. Angl.* ii. 169. 108.
Andrena Afzeliella, *Eversm. Bull. Mosc.* xxv. 27. 53? (1852).
Hab. Russia.

ANDRENA HATTORFIANA.

Andrena Hattorfiana, *Fabr. Syst. Piez.* p. 325. 14.
Eversm. Bull. Mosc. xxv. 28. 56 (1852).
Hab. Russia.

ANDRENA ROSÆ.

Andrena Rosæ, *Fabr. Syst. Piez.* p. 325. 15.
Eversm. Bull. Mosc. xxv. 29. 58 (1852?).
Hab. Russia.

ANDRENA FLOREA.

Andrena florea, *Fabr. Syst. Piez.* p. 324. 12.
Eversm. Bull. Mosc. xxv. 30. 59 (1852).
Hab. Russia.

ANDRENA FULVA.

Apis fulva, *Schrank, Ins. Aust.* p. 400. 805.
Andrena fulva, *Eversm. Bull. Mosc.* xxv. 31. 62 (1852).
Hab. Russia.

ANDRENA CETII.

Apis Cetii, *Schrank, Ins. Aust.* p. 405. 818.
Apis marginata, *Eversm. Bull. Mosc.* xxv. 31. 63 (1852).
Hab. Russia.

MACROPIS LABIATA. Page 125.

Megilla labiata, *Panz. Faun. Germ.* p. 107. 16.
Macropis labiata, *Eversm. Bull. Mosc.* xxvi. 61. 1 (1853).
Hab. Russia.

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8. DASYPODA VILLIPES. Page 125.

Dasypoda villipes, *Eversm. Bull. Mosc.* xxvi. 57. 4 (1853).
Hab. Russia.

9. DASYPODA BRACCATA.

Dasypoda braccata, *Eversm. Bull. Mosc.* xxvi. 57. 5 (1853).

Hab. Russia.

10. DASYPODA NEMORALIS.

Dasypoda nemoralis, *Bäer, Bull. Mosc.* xxvi. 70. 2. t. 1. f. 2. 2 ♂ ♀ (1853).

Hab. Russia.

11. DASYPODA PALLEOLA.

Dasypoda palleola, *Bäer, Bull. Mosc.* xxvi. 70. 3. t. 1. f. 3. 3 ♂ ♀ (1853).

Hab. Russia.

12. DASYPODA TSCHERTKOVIANA.

Dasypoda Tschertkoviana, *Bäer, Bull. Mosc.* xxvi. 71. t. 1. f. 5 ♀ (1853).

Hab. Russia.

13. DASYPODA THORACICA.

Dasypoda thoracica, *Bäer, Bull. Mosc.* xxvi. 72. t. 1. f. 6 ♀ (1853).

Hab. Russia.

14. DASYPODA MELANOPLEURA.

Dasypoda melanopleura, *Bäer, Bull. Mosc.* xxvi. 72. t. 1. f. 7. 7 ♂ ♀ (1853).

Hab. Russia.

15. DASYPODA DECORA.

Dasypoda decora, *Bäer, Bull. Mosc.* xxvi. 72. t. 1. f. 8. 8 ♂ ♀ (1853).

Hab. Russia.

16. DASYPODA NIGRICANS.

Dasypoda nigricans, *Bäer, Bull. Mosc.* xxvi. 73. t. 1. f. 9. 9 ♂ ♀ (1853).

Hab. Russia.

DASYPODA HIRTIPES.

Andrena hirtipes, *Fabr. Ent. Syst.* ii. 312. 24.

Dasypoda hirtipes, *Eversm. Bull. Mosc.* xxvi. 55. 1 (1853).
Bäer, Bull. Mosc. xxvi. 69. t. 1. f. 1 ♂ (1853).
Hab. Russia.

DASYPODA PLUMIPES.

Dasypoda plumipes, *Panz. Faun. Germ.* p. 99. 15.
Eversm. Bull. Mosc. xxv. 56. 3 (1852).
Bäer, Bull. Mosc. xxvi. 71. 4. t. 1. f. 4. 4 ♂ ♀ (1853).
Hab. Russia.

DASYPODA ARGENTATA.

Dasypoda argentata, *Panz. Faun. Germ.* p. 107. 15.
Eversm. Bull. Mosc. xxvi. 56. 2 (1853).
Hab. Russia.

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5. PANURGUS LABIATUS. Page 127.

Panurgus labiatus, *Eversm. Bull. Mosc.* xxvi. 62. 2.
Hab. Russia.

6. PANURGUS CLYPEATUS.

Panurgus clypeatus, *Eversm. Bull. Mosc.* xxvi. 62. 3.
Hab. Russia.

PANURGUS CALCARATUS.

Apis calcarata, *Scop. Ent. Carn.* p. 301. 803 ♂.
Panurgus lobatus, *Eversm. Bull. Mosc.* xxvi. 61. 1 (1853).
Hab. Russia.

Genus CAMPTOPÆUM.

Camptopæum, *Spin. Ann. Soc. Ent. Fr.* 2 sér. i. 139.

1. CAMPTOPÆUM GAYI.

Camptopæum Gayi, *Spin. Faun. Chili.* vi. 195. 1.
Hab. Chili.

2. CAMPTOPÆUM NOMADOIDES.

Camptopæum nomadoides, *Spin. Faun. Chili.* vi. 196. 2.
Hab. Chili.

3. CAMPTOPÆUM MACULATUM.

Camptopæum maculatum, *Spin. Faun. Chili.* vi. 197. 3.
Hab. Chili.

4. CAMPTOPÆUM TRIFASCIATUM.
Camptopæum trifasciatum, *Spin. Faun. Chili.* vi. 197. 4.
Hab. Chili.

5. CAMPTOPÆUM SUBMETALLICUM.
Camptopæum submetallicum, *Spin. Faun. Chili.* vi. 198. 5.
Hab. Chili.

6. CAMPTOPÆUM HIRSUTULUM.
Camptopæum hirsutulum, *Spin. Faun. Chili.* vi. 199. 6.
Hab. Chili.

7. CAMPTOPÆUM NIGRUM.
Camptopæum nigrum, *Spin. Faun. Chili.* vi. 199. 7.
Hab. Chili.

8. CAMPTOPÆUM VARIPES.
Camptopæum varipes, *Spin. Faun. Chili.* vi. 200. 8.
Hab. Chili.

SYSTROPHA CURVICORNIS. Page 131.
Eucera curvicornis, *Scop. Ann. Hist. Nat.* iv. 9.
Systropha spiralis, *Eversm. Bull. Mosc.* xxv. 59. 1 (1852).
Hab. Russia.

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6. ROPHITES CANA. Page 132.
Rophites cana, *Eversm. Bull. Mosc.* xxv. 60. 2 (1852).
Hab. Russia.

7. ROPHITES BISPINOSA.
Rophites bispinosa, *Eversm. Bull. Mosc.* xxv. 60. 3 (1852).
Hab. Russia.

ROPHITES QUINQUESPINOSA.
Rophites 5-spinosa, *Spin. Ins. Lig.* fasc. 2. 72. 5.
Eversm. Bull. Mosc. xxv. 60. 1 (1852).
Hab. Russia.

152. MEGACHILE MONOCEROS. Page 194.
Megachile monoceros, *Eversm. Bull. Mosc.* xxv. 64. 1 (1852).
Hab. Russia.

153. MEGACHILE MAXILLOSA.
Megachile maxillosa, *Eversm. Bull. Mosc.* xxv. 68. 2 (1852).
Hab. Russia.

154. MEGACHILE OBSCURA.
Megachile obscura, *Eversm. Bull. Mosc.* xxv. 71. 7 (1852).
Hab. Russia.

155. MEGACHILE ALBICILLA.
Megachile albicilla, *Eversm. Bull. Mosc.* xxv. 71. 8 (1852).
Hab. Russia.

156. MEGACHILE FULVIMANA.
Megachile fulvimana, *Eversm. Bull. Mosc.* xxv. 71. 9 (1852).
Hab. Russia.

157. MEGACHILE MELANOGASTER.
Megachile melanogaster, *Eversm. Bull. Mosc.* xxv. 73. 12 (1852).
Hab. Russia.

158. MEGACHILE MELATRONICHA.
Megachile melatronicha, *Spin. Faun. Chili.* vi. 179. 3.
Hab. Chili.

159. MEGACHILE CHILENSIS.
Megachile Chilensis, *Spin. Faun. Chili.* vi. 178. 1.
Hab. Chili.

MEGACHILE LAGOPODA.
Apis lagopoda, *Linn. Faun. Suec.* 1702.
Megachile lagopoda, *Eversm. Bull. Mosc.* xxv. 68. 3 (1852).
Hab. Russia.

MEGACHILE WILLUGHBIELLA.
Apis Willughbiella, *Kirby, Mon. Ap. Angl.* ii. 233. 41.
Megachile Willughbiella, *Eversm. Bull. Mosc.* xxv. 69. 4 (1852).
Hab. Russia.

MEGACHILE CENTUNCULARIS.

Apis centuncularis, *Linn. Faun. Suec.* 1687.
Megachile centuncularis, *Eversm. Bull. Mosc.* xxv. 70. 5 (1852).
Hab. Russia.

MEGACHILE CIRCUMCINCTA.

Apis circumcincta, *Kirby, Mon. Ap. Angl.* ii. 246. 45.
Megachile circumcincta, *Eversm. Bull. Mosc.* xxv. 70. 6 (1852).
Hab. Russia.

MEGACHILE ARGENTATA.

Apis argentata, *Fabr. Ent. Syst.* ii. 336. 96.
Megachile albiventris, *Eversm. Bull. Mosc.* xxv. 72. 10, nec *Panz.* (1852).
Hab. Russia.

MEGACHILE PACIFICA.

Apis pacifica, *Panz. Faun. Germ.* p. 55. 16.
Megachile pacifica, *Eversm. Bull. Mosc.* xxv. 72. 11 (1852).
Hab. Russia.

MEGACHILE POLLINOSA.

Megachile pollinosa, *Spin. Faun. Chili.* vi. 178. 2.
Hab. Chili.

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54. OSMIA FULVA. Page 143.

Osmia fulva, *Eversm. Bull. Mosc.* xxv. 63. 1 (1852).
Hab. Russia.

55. OSMIA SCITA.

Osmia scita, *Eversm. Bull. Mosc.* xxv. 63. 2 (1852).
Hab. Russia.

56. OSMIA HAMATA.

Osmia hamata, *Eversm. Bull. Mosc.* xxv. 64. 5 (1852).
Hab. Russia.

OSMIA RUFA.

Apis rufa, *Linn. Faun. Suec.* no. 1690 ♂.
Osmia bicornis, *Eversm. Bull. Mosc.* xxv. 63. 3 ♂ ♀ (1852).
Hab. Russia.

OSMIA SERRATULÆ.

Trachusa serratulæ, *Panz. Faun. Germ.* p. 86. 15.
Osmia serratulæ, *Eversm. Bull. Mosc.* xxv. 64. 4 (1852).

Hab. Russia.

OSMIA LEUCOMELANA.

Apis leucomelana, *Kirby, Mon. Ap. Angl.* ii. 260. 52.
Eversm. Bull. Mosc. xxv. 64. 6 (1852).

Hab. Russia.

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107. ANTHIDIUM LUNATUM. Page 217. B.M.

Female. Length 4 lines.—Black; the head and thorax strongly punctured, the punctures confluent on the disk of the thorax; the extreme base of the scape and the third joint of the flagellum ferruginous beneath. The thorax on the sides and beneath covered with large distinct punctures; the superior wings have a dark fuscous stain along their anterior margins; the scutellum bright yellow; the apical joints of the tarsi ferruginous; the anterior and intermediate tarsi clothed exteriorly with bright golden pubescence, that on the tarsi beneath ferruginous. Abdomen shining, finely punctured at the base, and gradually more strongly so to the apex, which is very coarsely punctured; the first and second segments have on each side a short yellow line, the third and fourth segments have in the middle a transverse narrow yellow fascia, the fifth and sixth segments are yellow, their apical margins only being very narrowly black; the ventral scopa golden-yellow.

Hab. Brazil (Alta de Chäa on the Tapajos). (Coll. H. W. Bates.)

ADDENDA ET CORRIGENDA.

Page 8, line 25. *For* antennæ *read* ocelli.

Page 19. Prosopis annulata, *Fabr.* (communis, *Nyland.*).
Prosopis dilatata, *Nyland. Ap. Boreal.* p. 188 (nec *Kirby*).

Page 48. Halictus flavipes, *Fabr., Nylander, Revis.* (ver.).
Halictus seladonius, *Ap. Boreal.* p. 203. 8 (nec *Fabr. Rev.*).

Page 104. Andrena analis, *Panz.* (nec *Fabr.*).
Andrena tarsata, *Nyland. Revis. Ap. Boreal.* p. 259.

Page 133. *After* line 17, *add* Subfam. 2. DASYGASTRÆ, *Latr.*

Page 138. Osmia serratulæ, *Panz.*
Trachusa serratulæ, *Nyland.*

EXPLANATION OF THE PLATES.

PLATE VII.

The letters indicate the same parts in all the figures; they are as follows:—*a.* the mentum; *b.* the labium; *c.* the labial palpi; *d.* the paraglossæ; *e.* the maxilla; *f.* the lobe of the maxilla; *g.* the maxillary palpus.

Fig.
1. *Anthidium Africanum.*
2. *Serapis denticulatus.*
3. *Osiris pallidus.*
4. *Exoneura bicolor.*
5. *Allodape pictifrons.*
6. *Habropoda ezonata.*

6 *a.* Posterior tibia and tarsus of *Habropoda ezonata.*

Fig.
7. Posterior tibia and tarsus of *Habropoda zonatula.*
8. *Xenoglossa fulva.*
9. *Exomalopsis fulvo-pilosa.*
10. *Tetrapedia diversipes.*

PLATE VIII.

1. *Chrysantheda frontalis.*
2. *Leiopodus lacertus.*
3. *Ancylosceles ursinus.*
4. *Centris dentata.*
5. *Epicharis bicolor.*
6. *Euglossa Romandii.*
7. *Euglossa pulchra.*

PLATE IX.

1. Tongue of *Serapis.*
2. Maxilla of *Serapis.*
3. Wing of *Serapis.*
4. Mandible of *Serapis.*
5. Labrum of *Serapis.*
6. Tongue of *Allodape.*
7. Maxilla of *Allodape.*
8. Wing of *Allodape.*
9. Tongue of *Exoneura.*
10. Maxilla of *Exoneura.*
11. Posterior leg of *Exoneura.*
12. Claw of *Exoneura.*
13. Wing of *Exoneura.*
14. Tongue of *Leiopodus.*
15. Maxilla of *Leiopodus.*
16. Wing of *Leiopodus.*
17. Tongue of *Crocisa.*
18. Maxilla of *Crocisa.*
19. Wing of *Crocisa.*

PLATE X.

Fig.
1. Tongue of *Liogastra.*
2. Maxilla of *Liogastra.*
3. Wing of *Liogastra.*
4. Tongue of *Euritis.*
5. Maxilla of *Euritis.*
6. Calcar or spur of the posterior tibiæ of *Euritis.*
7. Labrum of *Euritis.*
8. Wing of *Euritis.*
9. Tongue of *Melissa.*

Fig.
10. Maxilla of *Melissa.*
11. Spur of the intermediate tibiæ.
12. Wing of *Melissa.*
13. Tongue of *Mesocheira.*
14. Maxilla of *Mesocheira.*
15. Spur of intermediate tibiæ.
16. Wing of *Mesocheira.*
17. Wing of *Acanthopus.*

PLATE XI.

1. Tongue of *Thalestria.*
2. Maxilla of *Thalestria.*
3. Wing of *Thalestria.*
4. Labrum of *Thalestria.*
5. Tongue of *Ctenioschelus.*
6. Maxilla of *Ctenioschelus.*
7. Maxillary palpus of *Ctenioschelus.*
8. Antennæ of *Ctenioschelus.*
9. Wing of *Ctenioschelus.*
10. Spur of intermediate tibiæ of *Ctenioschelus.*
11. Tongue of *Aglae.*
12. Maxilla of *Aglae.*
13. Wing of *Aglae.*
14. Wing of *Melecta.*
15. Wing of *Crocisa.*
16. Wing of *Philoremus.*
17. Wing of *Ammobates.*
18. Wing of *Pasites.*

PLATE XII.

1. Tongue of *Osiris.*
2. Wing of *Osiris.*
3. Labrum of *Osiris.*
4. Apex of the abdomen of *Osiris,* anal valve and aculeus.
5. Maxilla of *Osiris.*
6. Antennæ of *Osiris.*
7. Maxilla of *Xenoglossa.*
8. Wing of *Xenoglossa.*
9. Maxilla of *Habropoda.*
10. Tongue of *Habropoda.*
11. Wing of *Habropoda.*
12. Tongue of *Lestis.*
13. Maxilla of *Lestis.*
14. Antenna of *Lestis.*
15. Wing of *Lestis.*
16. Tongue of *Dioxys.*
17. Labrum of *Dioxys.*
18. Wing of *Dioxys.*
19. Mandible of *Dioxys.*
20. Maxilla of *Epicharis.*
21. Wing of *Epicharis.*

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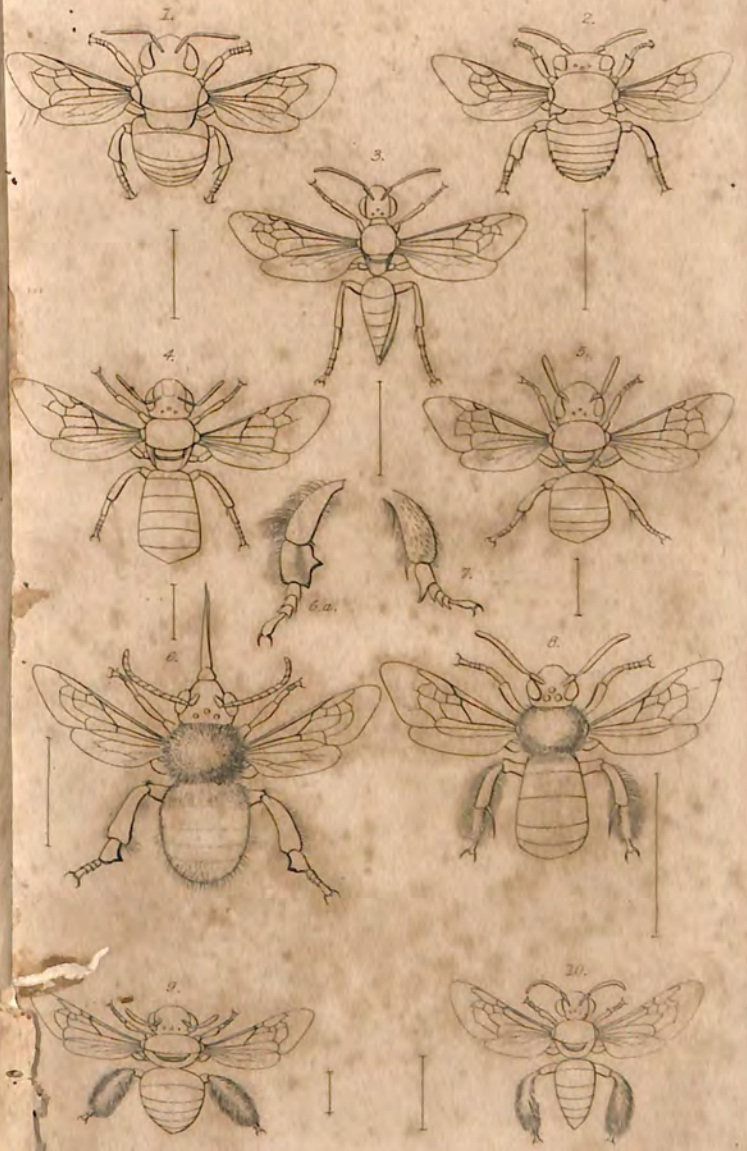
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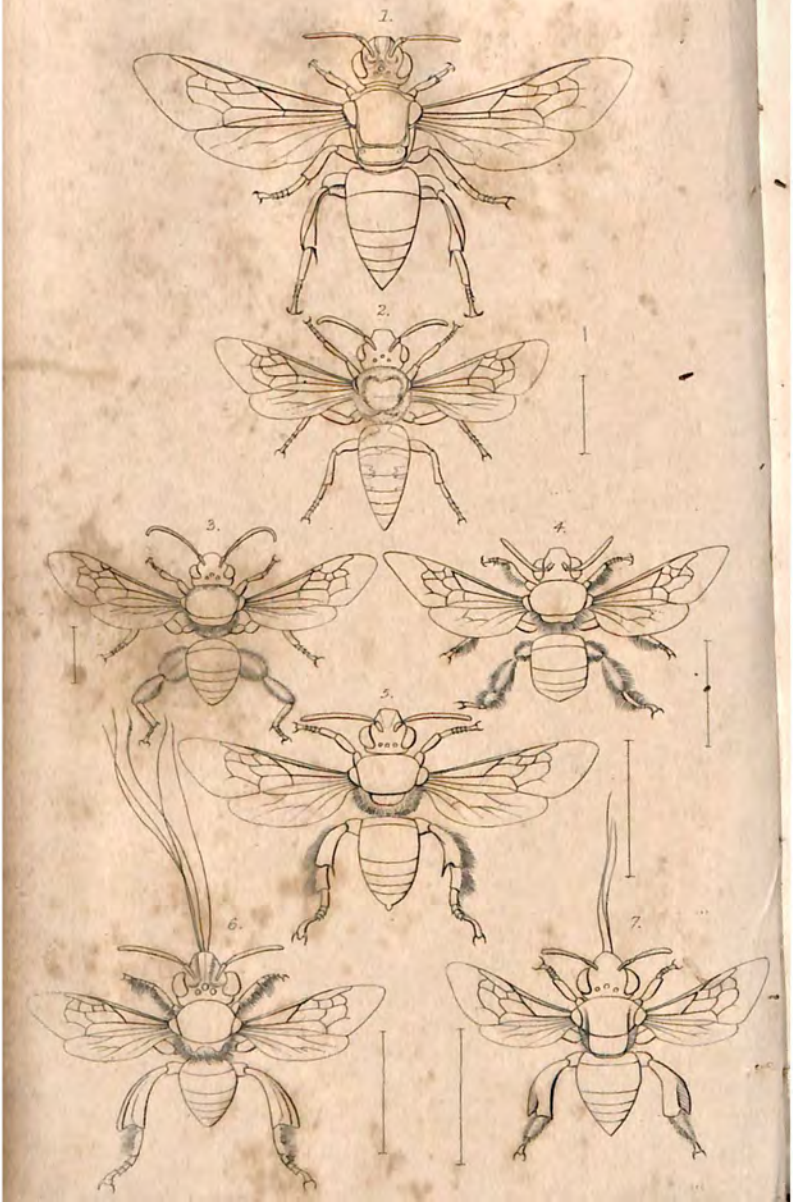
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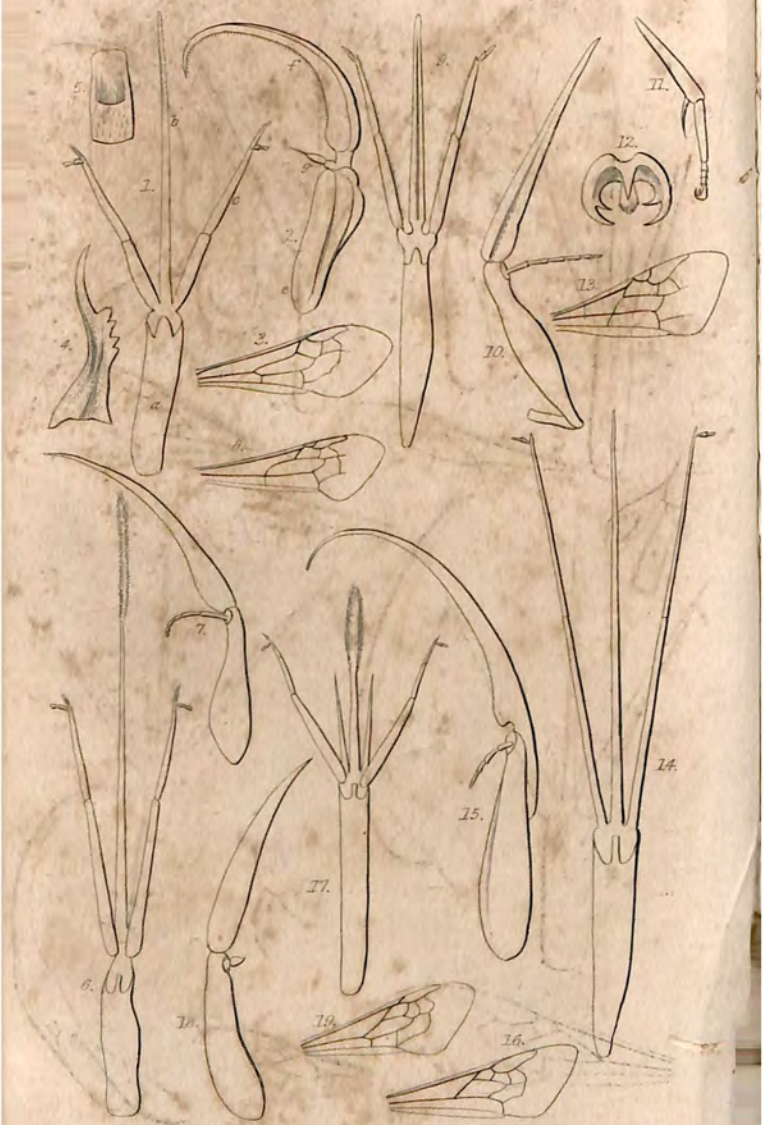
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June 1853.

CATALOGUE

OF

HYMENOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

PART III.

MUTILLIDÆ AND POMPILIDÆ.

LONDON:
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1855.

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PREFACE.

THE principal object of the present Catalogue has been to give a complete list of all the known species of Fossorial Hymenoptera, at the same time indicating those at present contained in the Collection of the British Museum.

This Part of the Catalogue contains the MUTILLIDÆ and POMPILIDÆ, and has been prepared by Mr. FREDERICK SMITH, who has taken every care in the determination of the species, in referring to the synonyma, and in the descriptions of those species which appear to have remained hitherto undescribed.

The remaining Parts will follow as soon as they can be completed.

JOHN EDWARD GRAY.

7 March 1855.

CATALOGUE

OF

HYMENOPTERA.

Div. II. ACULEATA.

Tribe 1. HETEROGYNA.

Fam. 2. MUTILLIDÆ.

Genus 1. MUTILLA.

Mutilla, *Linn. Syst. Nat.* i. 966, 1766.
Tiphia, pt., *Rossi, Faun. Etrus.* ii. 68.
Psammotherma, *Latr. Fam. Nat.*?, 1825.

1. MUTILLA EUROPÆA. . . B.M.

Mutilla Europæa, *Linn. Faun. Suec.* no. 1727 ♀; *Syst. Nat.* i. 966. 4.
Sulz. Gesch. Ins. t. 27. f. 23 ♂, 24 ♀.
Schrank, Ins. Aust. p. 415. 839.
Oliv. Ency. Méth. viii. 57. 15.
Rossi, Faun. Etrus. ii. 114. 939.
Christ. Hym. p. 147. t. 11. f. 1 ♂, 2 ♀.
Don. Brit. Ins. vi. 77. t. 212.

Mutilla Europæa, *Fabr. Ent. Syst.* ii. 368. 9; *Syst. Piez.* p. 430. 11.
Latr. Act. Soc. Hist. Nat. i. 7. 2; *Hist. Nat. Ins.* xiii. 263.
Panz. Faun. Germ. 76. 20 ♂.
Shuck. Foss. Hym. p. 29. 1.
St. Farg. Hym. iii. 597. 3 ♀.
Baer, Bull. Soc. Imp. Nat. Mosc. xxi. 229. 2.
Nyland. Ap. Boreal. p. 8. 1.
Mutilla Panzeri, *St. Farg. Hym.* iii. 602. 11 ♂.

Hab. Britain; Sweden; Austria; Italy; Germany; Finland; Russia (Elisabethgrad and Wosnesensk).

2. MUTILLA AUSTRIACA.

Mutilla Austriaca, *Panz. Faun. Germ.* 62. 20 ♂.
St. Farg. Hym. iii. 598. 4 ♂ ♀.

Hab. France; Italy; Germany.

3. MUTILLA BITUBERCULATA.

Mutilla tuberculata, *St. Farg. Hym.* iii. 619. 38 ♀ (nec *Fabr.*).

Hab. South of France.

4. MUTILLA BIMACULATA.

Mutilla bimaculata, *Jurine*, t. 12. f. 38 ♂.
Wesm. Hym. Fouis. Belg. p. 10. 3.

Hab. France; Belgium.

5. MUTILLA CALVA. B.M.

Mutilla calva, *Villers, Ent.* iii. 343. 9. t. 8. f. 34 ♀.
Fabr. Ent. Syst. Supp. p. 282. 24; *Syst. Piez.* p. 438. 46.
Latr. Act. Soc. Hist. Nat. i. 10. 8; *Ency. Méth.* viii. 64. 56.
Coqueb. Illus. Icon. Ins. dec. ii. t. 16. f. 10.
Shuck. Foss. Hym. p. 30. 2 ♂ ♀.
St. Farg. Hym. iii. 607. 19.
Nyland. Ap. Boreal. p. 11. 3.
Baer, Bull. Soc. Imp. Nat. Mosc. xxi. 230. 4.
Wesm. Hym. Fouis. Belg. p. 18. 6.
Mutilla nigrita, *Panz. Faun. Germ.* 80. 22 ♂.
Fabr. Syst. Piez. p. 437. 40.
Oliv. Ency. Méth. viii. 65. 59.
St. Farg. Hym. iii. 599. 6.

Hab. Britain?; France; Germany; Italy; Russia (Gluchow).

6. MUTILLA CORONATA. B.M.

Mutilla coronata, *Fabr. Ent. Syst.* ii. 369. 14; *Syst. Piez.* p. 432. 17.
Rossi, Faun. Etrus. Mant. t. 2. f. *k*
Panz. Faun. Germ. 55. 24.
Oliv. Ency. Méth. viii. 60. 29.
St. Farg. Hym. iii. 613. 29.

Hab. Austria; France; Germany: Port Natal.

7. MUTILLA CILIATA.

Mutilla ciliata, *Fabr. Ent. Syst.* ii. 371. 23 ♂; *Syst. Piez.* p. 437. 41.
Oliv. Ency. Méth. viii. 65. 60.
Panz. Faun. Germ. 106. 21?
St. Farg. Hym. iii. 610. 25.

Hab. France; Saxony.

8. MUTILLA EPHIPPIUM. B.M.

Mutilla ephippium, *Fabr. Ent. Syst.* ii. 370. 18 ♂.
Rossi, Faun. Etrus. Mant. i. t. 2. f. *n*. ♀.
Oliv. Ency. Méth. viii. 63. 45.
Curtis, Brit. Ent. ii. t. 79 ♂ ♀.
Shuck. Foss. Hym. p. 31. 3.
St. Farg. Hym. iii. 608. 22.
Nyland. Ap. Boreal. p. 13. 4.
Baer, Bull. Mosc. xxi. 229.
Mutilla rufipes, *Fabr. Ent. Syst.* ii. 372. 26 ♀.
Latr. Act. Soc. Hist. Nat. i. 9. 6.
Oliv. Ency. Méth. viii. 66. 68.
Coqueb. Illus. Icon. Ins. t. 16. f. 9.
St. Farg. Hym. iii. 612. 28.
Wesm. Hym. Fouis. Belg. p. 7. 1.
Mutilla sellata, *Panz. Faun. Germ.* 46. 19 ♀.

Hab. Britain; France; Germany; Italy; Saxony; Sweden; Finland.

9. MUTILLA MAURA. B.M.

Mutilla Maura, *Linn. Syst. Nat.* i. 967. 6 ♀.
Fabr. Ent. Syst. ii. 369. 12; *Syst. Piez.* p. 431. 15.
Coqueb. Ill. Icon. Ins. 67. t. 16. f. 7.
Latr. Act. Soc. Hist. Nat. Par. i. 8. 4.
Oliv. Ency. Méth. viii. 61. 36.
Brullé, Expéd. Sc. Morée, iii. 372. 821.

Mutilla Maura, *St. Farg. Hym.* iii. 613. 30. t. 36. f. 6 ♀, 7 ♂.
Lucas, Explo. Sc. Algér. iii. 291. 309.
Baer, Soc. Imp. Nat. Mosc. xxi. 230 (1848).

Hab. France; Germany; Algeria; Russia (Elisabethgrad).

10. MUTILLA PEDEMONTANA. B.M.

Mutilla Pedemontana, *Fabr. Ent. Syst. Supp.* 281. 19 ♂; *Syst. Piez.* p. 434. 29.
Panz. Faun. Germ. 19.
Oliv. Ency. Méth. viii. 62. 43.
St. Farg. Hym. iii. 632. 56.
Lucas, Explo. Sc. Algér. iii. 293. 314.

Hab. Italy; Germany; France; Algeria.

11. MUTILLA PUNCTATA.

Mutilla punctata, *Latr. Act. Soc. Hist. Nat.* i. 11. 10.

Hab. France (Provence).

12. MUTILLA RUBRICANS.

Mutilla rubricans, *St. Farg. Hym.* iii. 612. 27 ♂.

Hab. France.

13. MUTILLA SCUTELLARIS. B.M.

Mutilla scutellaris, *Latr. Act. Soc. Hist. Nat. Par.* i. 10. 7 ♀.
Oliv. Ency. Méth. viii. 64. 53.

Hab. France; Tangier.

14. MUTILLA OPACA.

Mutilla opaca, *St. Farg. Hym.* iii. 624. 44 ♀.

Hab. South of Europe.

15. MUTILLA MACQUARTI.

Mutilla Macquarti, *St. Farg. Hym.* iii. 633. 57 ♂.

Hab. South of France.

16. MUTILLA AUCTA.

Mutilla aucta, *St. Farg. Hym.* iii. 505. 16 ♀.

Hab. France (Montpellier).

17. MUTILLA ERYTHROCEPHALA. B.M.

Mutilla erythrocephala, *Fabr. Ent. Syst.* ii. 371 ♀. 34; *Syst. Piez.* p. 438. 44.
Oliv. Ency. Méth. viii. 66. 66.
Latr. Act. Soc. Nat. Hist. i. 8. 3.
St. Farg. Hym. iii. 607. 20.

Hab. France (Provence; Paris).

18. MUTILLA EXCORIATA.

Mutilla excoriata, *St. Farg. Hym.* iii. 615. 32 ♀.

Hab. France (Montpellier).

19. MUTILLA INTERRUPTA.

Mutilla interrupta, *Latr. Act. Soc. Hist. Nat. Par.* i. 9. 5 ♀.

Hab. France (Provence).

20. MUTILLA MONSPELIENSIS.

Mutilla Monspeliensis, *St. Farg. Hym.* iii. 616. 34.

Hab. France (Montpellier).

21. MUTILLA GHILIANI. B.M.

Mutilla Ghiliani, *Spin. Ann. Soc. Ent. Fr.* i. 2me ser. 130. 19 ♂.

Hab. Spain; Polish Ukraine.

22. MUTILLA INCOMPLETA.

Mutilla incompleta, *St. Farg. Hym.* iii. 609. 23 ♂.
Myrmilla incompleta, *Wesm. Hym. Fouis. Belg.* p. 14. 5 ♂ ♀.

Hab. Belgium.

23. MUTILLA MONTANA.

Mutilla montana, *Panz. Faun. Germ.* 97. 20 ♀.
Wesm. Hym. Fouis. Belg. p. 11. 4.

Hab. Germany; Belgium.

24. MUTILLA PETIOLARIS.

Mutilla petiolaris, *Fabr. Syst. Piez.* p. 437. 39.

Hab. Germany.

25. MUTILLA SUBCOMATA.

Mutilla subcomata, *Wesm. Hym. Fouis. Belg.* p. 9. 2 ♀.

Hab. Belgium.

26. MUTILLA HUNGARICA. B.M.

Mutilla Hungarica, *Fabr. Ent. Syst.* ii. 369. 13 ♀ ; *Syst. Piez.* p. 432. 16.
Oliv. Ency. Méth. viii. 60. 30.
St. Farg. Hym. iii. 615. 33.
Mutilla calva, *Panz. Faun. Germ.* 83. 20.
Mutilla sex-maculata, *Baer, Bull. Soc. Imp. Nat. Mosc.* xxi. 232. 11 ♀ . t. 2. f. 8.

Hab. Saxony ; France ; Polish Ukraine ; Russia (Elisabethgrad).

27. MUTILLA REGALIS.

Mutilla regalis, *Fabr. Ent. Syst.* ii. 371. 21 ♀ ; *Syst. Piez.* p. 435. 34.
Oliv. Ency. Méth. viii. 63. 47.

Hab. Hungary.

28. MUTILLA FRATERNA.

Mutilla fraterna, *Baer, Bull. Soc. Imp. Nat. Mosc.* xxi. t. 2. f. 2 ♀ (1848).

Hab. Russia (Gluchow).

29. MUTILLA GIBBA.

Mutilla gibba, *Baer, Bull. Soc. Imp. Nat. Mosc.* xxi. 231. 8. t. 2. f. 5 (1848).

Hab. Russia (Romen).

30. MUTILLA KASCHIRIENSIS.

Mutilla Kaschiriensis, *Baer, Bull. Soc. Imp. Nat. Mosc.* xxi. 229. 3 ♂ (1848).

Hab. Russia (Kaschiram).

31. MUTILLA MARGINATA.

Mutilla marginata, *Baer, Bull. Soc. Imp. Nat. Mosc.* xxi. t. 2. f. 4 ♀ (1848).

Hab. Russia (Elisabethgrad).

32. MUTILLA NEMORALIS.

Mutilla nemoralis, *Baer, Bull. Soc. Imp. Nat. Mosc.* xxi. t. 2. f. 6 ♀ (1848).

Hab. Russia (Kaschiram).

33. MUTILLA PETIOLATA.

Mutilla petiolata, *Baer, Bull. Soc. Imp. Nat. Mosc.* xxi. t. 2. f. 7 (1848).

Hab. Russia.

34. MUTILLA RUFICOLLIS.

Mutilla ruficollis, *Fabr. Ent. Syst.* ii. 371. 22; *Syst. Piez.* p. 436. 37.
Oliv. Ency. Méth. viii. 64. 52.
Mutilla ephippium, *Fabr.* ♂?

Hab. Italy.

35. MUTILLA STRIDULA. B.M.

Tiphia stridula, *Rossi, Faun. Etrus.* ii. 68. 830. t. 6. f. 2 ♂.
Mutilla italica, *Fabr. Ent. Syst.* ii. 370.19; *Syst. Piez.* p. 434. 28.
Oliv. Ency. Méth. viii. 62. 42.
St. Farg. Hym. iii. 626. 46.
Mutilla stridula, *Brullé, Expéd. Sc. de Morée,* iii. 371. 819.
Mutilla Pedemontana, *Fabr. Syst. Piez.* p. 434. 29?

Hab. Italy; Greece.

36. MUTILLA GRÆCA. B.M.

Mutilla Græca, *St. Farg. Hym.* iii. 625. 45.

Hab. Morea.

37. MUTILLA LITTORALIS. B.M.

Mutilla littoralis, *Petagn. Sp. Ins. Cal.* p. 33. t. 37.
Oliv. Ency. Méth. viii. 57. 13.
Brullé, Expéd. Sc. de Morée, iii. 372. 820. t. 50. f. 12.

Hab. Morea.

38. MUTILLA AGRESTIS.

Mutilla agrestis, *St. Farg. Hym.* iii. 605. 15 ♀.

Hab. France.

39. MUTILLA CÆRULANS.

Mutilla cærulans, *St. Farg. Hym.* iii. 599. ♂.

Hab. France.

40. MUTILLA CYANEA.
Mutilla cyanea, *St. Farg. Hym.* iii. 600. 8 ♂.
Hab. France.

41. MUTILLA CLAUSA.
Mutilla clausa, *St. Farg. Hym.* iii. 601. 9 ♂.
Hab. France.

42. MUTILLA CONFUSA.
Mutilla confusa, *St. Farg. Hym.* iii. 604. 14 ♂.
Hab. France.

43. MUTILLA DIFFERENS.
Mutilla differens, *St. Farg. Hym.* iii. 603. 12 ♂.
Hab. France.

44. MUTILLA DISTINCTA.
Mutilla distincta, *St. Farg. Hym.* iii. 606. 18 ♀ (var. M. calva?).
Hab. Paris.

45. MUTILLA DIMIDIATA.
Mutilla dimidiata, *Latr. Act. Soc. Hist. Nat.* i. 11. 11 ♀.
Hab. France.

46. MUTILLA GRISESCENS.
Mutilla grisescens, *St. Farg. Hym.* iii. 626. 47 ♂.
Hab. France.

47. MUTILLA OBLITERATA. B.M.

Male. Length 4½ lines.—Head, thorax and legs ferruginous, thinly clothed with long loose cinereous pubescence; eyes reniform, the head quadrate, strongly punctured. Thorax: the prothorax as well as the mesothorax covered, not very closely, with large deep punctures; on the metathorax the punctures are large, close, and very shallow; the metathorax channeled in the middle, the channel broadest at the base; the wings subhyaline, the third submarginal, as well as the third discoidal cell obso-

lete. Abdomen petiolate, black, strongly punctured, the petiole ferruginous; the entire abdomen thinly covered with long cinereous pubescence.

Hab. Albania.

48. MUTILLA HALENSIS. B.M.

Mutilla Halensis, *Fabr. Ent. Syst.* ii. 369. 15 ♀; *Syst. Piez.* p. 432. 20.
Oliv. Ency. Méth. viii. 62. 44.
St. Farg. Hym. iii. 637. 64.

Hab. Europe.

49. MUTILLA CORNUTA.

Mutilla cornuta, *Oliv. Ency. Méth.* viii. 64. 55.

Hab. ——?

50. MUTILLA VITTATA.

Mutilla vittata, *Oliv. Ency. Méth.* viii. 64. 54.

Hab. ——?

51. MUTILLA 8-MACULATA.

Mutilla 8-maculata, *Spin. Ann. Soc. Ent. Fr.* i. 2me ser. 129. 18 ♀.

Hab. Spain.

52. MUTILLA ANGUSTICOLLIS.

Mutilla angusticollis, *Spin. Ann. Soc. Ent. Fr.* i. 2me ser. 132. 21 ♀.

Hab. Spain.

53. MUTILLA ARENARIA. B.M.

Mutilla arenaria, *Fabr. Ent. Syst.* ii. 370. 16 ♀; *Syst. Piez.* p. 433. 22.
Coqueb. Illus. Icon. Ins. p. 66. t. 16. f. 3.
Oliv. Ency. Méth. viii. 61. 37.
St. Farg. Hym. iii. 614. 31.
Lucas, Explo. Sc. Algér. iii. 291. 310.

Hab. Spain; Morocco; Algeria.

54. MUTILLA BARBARA. B.M.

Mutilla Barbara, *Linn. Syst. Nat.* i. 967. 7.
Oliv. Ency. Méth. viii. 58. 17.

Hab. Barbary.

55. MUTILLA ARABICA.

Mutilla Arabica, *Oliv. Ency. Méth.* viii. 59. 27.
Mutilla Oraniense, *Lucas, Explo. Sc. Algér.* iii. 287 ?

Hab. Arabia.

56. MUTILLA AUREA.

Mutilla aurea, *Klug, Symb. Phys.* dec. i. no. 13. t. 4. f. 13.

Hab. Arabia.

57. MUTILLA BICOLOR.

Mutilla bicolor, *Oliv. Ency. Méth.* viii. 57. 13.

Hab. Arabia.

58. MUTILLA BIFASCIATA.

Mutilla bifasciata, *Klug, Symb. Phys.* dec. i. no. 19. t. 5. f. 5.

Hab. Syria.

59. MUTILLA CINERASCENS.

Mutilla cinerascens, *Oliv. Ency. Méth.* viii. 56. 12.

Hab. Persia.

60. MUTILLA CONJUNCTA.

Mutilla conjuncta, *Klug, Symb. Phys.* dec. i. no. 5. t. 4. f. 5.

Hab. Arabia Felix.

61. MUTILLA CHRYSOPHTHALMA.

Mutilla chrysophthalma, *Klug, Symb. Phys.* dec. i. no. 17. t. 5. f. 3.

Hab. Arabia Felix.

62. MUTILLA FIMBRIATA.

Mutilla fimbriata, *Klug, Symb. Phys.* dec. i. no. 3. t. 4. f. 3.

Hab. Egypt; Arabia Felix.

63. MUTILLA FLORALIS.

Mutilla floralis, *Klug, Symb. Phys.* dec. i. no. 16. t. 5. f. 1, 2.

Hab. Arabia.

64. MUTILLA QUINQUEFASCIATA.

Mutilla quinquefasciata, *Oliv. Ency. Méth.* viii. 60. 53 ♀.

Hab. Persia; Arabia.

65. MUTILLA TESTACEA.

Mutilla testacea, *Klug, Symb. Phys.* dec. i. no. 18. t. 5. f. 4.

Hab. Arabia Felix.

66. MUTILLA TRICOLOR.

Mutilla tricolor, *Klug, Symb.* Phys. dec. i. no. 15. t. 4. f. 15.

Hab. Arabia.

67. MUTILLA MACULOSA. B.M.

Mutilla maculosa, *Oliv. Ency. Méth.* viii. 58. 17 ♀.
St. Farg. Hym. iii. 617. 35.
Lucas, Explo. Sc. Algér. iii. 293. 313.

Hab. Egypt; Algeria; Tunis; Malaga.

68. MUTILLA VILLOSA.

Mutilla villosa, *Klug, Symb. Phys.* dec. i. no. 12. t. 4. f. 12.

Hab. Syria.

69. MUTILLA CRASSA.

Mutilla crassa, *Klug, Symb. Phys.* dec. i. no. 23. t. 5. f. 9.

Hab. Egypt.

70. MUTILLA CHIESI.

Mutilla Chiesi, *Spin. Ann. Soc. Ent. Fr.* vii. 457. 7 ♀ (1838).

Hab. Egypt.

71. MUTILLA DIVISA.

Mutilla interrupta, *Oliv. Ency. Meth.* viii. 62. 39 (nec *Latr.*).
Klug, Symb. Phys. dec. i. no. 11. t. 4. f. 11.

Hab. Egypt; Arabia.

72. MUTILLA FASCIATA.

Mutilla fasciata, *Klug, Symb. Phys.* dec. i. no. 6. t. 4. f. 6.

Hab. Egypt.

73. MUTILLA FRONTALIS.

Mutilla frontalis, *Klug, Symb. Phys.* dec. i. no. 2. t. 4. f. 2.

Hab. Egypt.

74. MUTILLA LEUCOPYGA. B.M.

Mutilla leucopyga, *Klug, Symb. Phys.* dec. i. no. 10. t. 4. f. 10.

Hab. Egypt.

75. MUTILLA NILOTICA.

Mutilla Nilotica, *Klug, Symb. Phys.* dec. i. no. 21. t. 5. f. 7.

Hab. Egypt.

76. MUTILLA NITIDIVENTRIS.

Mutilla nitidiventris, *Klug, Symb. Phys.* dec. i. t. 4. f. 14.

Hab. Egypt.

77. MUTILLA ORNATA. B.M.

Mutilla ornata, *Klug, Symb. Phys.* dec. i. no. 22. t. 5. f. 8.
Savig. Descr. Egypt. t. 19. f. 23.

Hab. Egypt.

78. MUTILLA PEDUNCULATA. B.M.

Mutilla pedunculata, *Klug, Symb. Phys.* dec. i. no. 24. t. 5. f. 10.

Hab. Arabia; Egypt.

79. MUTILLA QUINQUEPUNCTATA.

Mutilla quinquepunctata, *Oliv. Ency. Méth.* viii. 58. 22 ♀.
St. Farg. Hym. iii. 618. 36.

Hab. Egypt.

80. MUTILLA QUADRINOTATA.

Mutilla quinquepunctata, *Oliv. Ency. Méth.* viii. 58. 22 ?
St. Farg. Hym. iii. 618. 36.
Mutilla quadrinotata, *Klug, Symb. Phys.* dec. i. no. 4. t. 4. f. 4.

Hab. Egypt.

81. MUTILLA SANGUINICOLLIS.

Mutilla sanguinicollis, *Klug, Symb. Phys.* dec. i. no. 8. t. 4. f. 8.

Hab. Egypt.

82. MUTILLA SEMISTRIATA.

Mutilla semistriata, *Klug, Symb. Phys.* dec. i. no. 9. t. 4. f. 9.

Hab. Egypt.

83. MUTILLA SINUATA.

Mutilla sinuata, *Oliv. Ency. Méth.* viii. 58. 18.

Hab. Egypt.

84. MUTILLA SIGNATA.

Mutilla signata, *Klug, Symb. Phys.* dec. i. no. 7. t. 19. f. 7; *Savig. Descr. Egypt.* t. 4. f. 7.

Hab. Egypt.

85. MUTILLA CONTINUA. B.M.

Mutilla continua, *Fabr. Syst. Piez.* p. 430. 10.
Klug, Symb. Phys. dec. i. no. 1. t. 4. f. 1.
Oliv. Ency. Méth. viii. 57. 14.
St. Farg. Hym. iii. 606. 17.

Hab. Guinea; Egypt; France (Montpellier).

86. MUTILLA ALGIRA.

Mutilla Algira, *St. Farg. Hym.* iii. 641. 72 ♀.
Lucas, Explo. Sc. Algér. iii. 295. 320.

Hab. Algeria (Oran).

87. MUTILLA SPINIFERA.

Mutilla spinifera, *Oliv. Ency. Méth.* viii. 59. 28.

Hab. Africa.

88. MUTILLA SEXPUNCTATA.

Mutilla sexpunctata, *Swed. Nov. Act. Holm.* viii. 285. 43 (1787).

Hab. Africa.

89. MUTILLA COGNATA.

Mutilla affinis, *Lucas, Explo. Sc. Algér.* iii. 292. 312 (nec *Westw.*).

Hab. Algeria.

90. MUTILLA DISPAR. B.M.

Mutilla bipunctata, *St. Farg. Hym.* iii. 642. 73 ♀ (nec *Latr.*).

Hab. Algeria (Oran).

91. MUTILLA DORSALIS. B.M.

Mutilla dorsalis, *Lucas, Explo. Sc. Algér.* iii. 288. 305. t. 15. f. 11.

Hab. Algeria.

92. MUTILLA HOTTENTOTTA.

Mutilla Hottentotta, *Fabr. Ent. Syst.* ii. 370. 17; *Syst. Piez.* p. 433. 24 ♀.
Oliv. Ency. Méth. viii. 58. 21.
Lucas, Explo. Sc. Algér. iii. 295. 321.
Mutilla Barbara, *Fabr. Ent. Syst.* ii. 370. 17 ?

Hab. Algeria; Barbary.

93. MUTILLA LUCTUOSA.

Mutilla luctuosa, *Lucas, Explo. Sc. Algér.* iii. 291. 311. t. 16. f. 1.

Hab. Algeria.

94. MUTILLA LUCASII.

Mutilla bicolor, *Lucas, Explo. Sc. Algér.* iii. 289. 306 (nec *Oliv.*).

Hab. Algeria.

95. MUTILLA LUGUBRIS.

Mutilla lugubris, *Fabr. Syst. Piez.* p. 433. 23 ♂.
Oliv. Ency. Méth. viii. 62. 40.

Hab. Tangier.

96. MUTILLA ORANIENSIS. B.M.

Mutilla Oraniensis, *Lucas, Explo. Sc. Algér.* iii. 287. 304. t. 15. f. 10.

Hab. Algeria.

97. MUTILLA QUADRIMACULATA. B.M.

Mutilla quadrimaculata, *Lucas, Explo. Sc. Algér.* iii. 296. 322.

Hab. Algeria.

98. MUTILLA RUBRICOLLIS.

Mutilla rubricollis, *Lucas, Explo. Sc. Algér.* iii. 297. 324.

Hab. Algeria.

99. MUTILLA RUBROCINCTA.

Mutilla rubrocincta, *Lucas, Explo. Sc. Algér.* iii. 289. 306. t. 15. f. 12.

Hab. Algeria.

100. MUTILLA RUFICEPS.

Mutilla erythrocephala, *Lucas, Explo. Sc. Algér.* iii. 298. 327. t. 16. f. 6 (nec *Fabr.*).

Hab. Algeria.

101. MUTILLA SENEGALENSIS.

Mutilla Senegalensis, *Guér. Mag. Zool.* 1831; *Icon. Règ. Anim.* p. 429.

Hab. Senegal.

102. MUTILLA SPINOLÆ. B.M.

Mutilla Spinolæ, *St. Farg. Hym.* iii. 640. 70 ♀.
Lucas, Explo. Sc. Algér. iii. 293. 315. t. 16. f. 7.

Hab. Algeria (Oran).

103. MUTILLA TABIDA. B.M.

Mutilla tabida, *Lucas, Explo. Sc. Algér.* iii. 298. 326. t. 16. f. 5.

Hab. Algeria.

104. MUTILLA TUNENSIS. B.M.

Mutilla Tunensis, *Fabr. Syst. Piez.* p. 433. 21 ♀.
Oliv. Ency. Méth. viii. 61. 38.
St. Farg. Hym. iii. 431. 71.
Lucas, Explo. Sc. Algér. iii. 295. 319.

Hab. Tunis; Algeria (Oran).

105. MUTILLA UNIMACULATA. B.M.

Mutilla unimaculata, *Lucas, Explo. Sc. Algér.* iii. 294. 318. t. 16. f. 3.

Hab. Algeria.

106. MUTILLA UNICINCTA. B.M.

Mutilla unicincta, *Lucas, Explo. Sc. Algér.* iii. 293. 317. t. 16. f. 2.

Hab. Algeria.

This is probably a mere variety of the *M. bipunctata* of St. Fargeau, which has the head sometimes red, although usually it is black.

107. MUTILLA MAROCANA.

Mutilla Marocana, *Oliv. Ency. Méth.* viii. 58. 20.
Mutilla Barbara, *Fabr. Syst. Piez.* p. 434. 26.

Hab. Morocco.

108. MUTILLA ATRA. B.M.

Mutilla atra, *Linn. Syst. Nat.* i. 966. 5.
Fabr. Ent. Syst. ii. 369. 11; *Syst. Piez.* p. 431. 14.
Oliv. Ency. Méth. viii. 59. 26.

Hab. Africa; Interior of South Africa.

109. MUTILLA MELICERTA. B.M.

Male. Length 5½ lines.—Black, head small, much narrower than the thorax, the eyes ovate, the pubescence black, mixed with a few fulvous hairs on the vertex. The prothorax clothed above with bright fulvous pubescence; the mesothorax produced on each side of the scutellum into an angular tooth; the metathorax and legs thinly covered with long black pubescence; the wings dark brown, and having a slight violet iridescence. Abdomen: the basal segment clavate, much narrower than the second; the apical margin of the second segment having a broad fascia and the two following segments clothed with rich bright fulvous pubescence; the base and apex of the abdomen thinly clothed with long black pubescence.

Hab. Cape of Good Hope.

110. MUTILLA NOTATA.

Mutilla notata, *S. Farg. Hym.* iii. 600. 7 ♀.

Hab. Cape of Good Hope.

111. MUTILLA MINOS. B.M.

Male. Length 7 lines.—Black, the eyes notched; the face, parts of the mouth and cheeks have a thin cinereous pubescence,

that on the vertex is black. Thorax: the mesothorax covered with confluent punctures, having a central slightly raised carina, on each side of which is a deep elongate groove, not quite extending to the anterior margin; wings of a blackish-brown, and having a bright violet iridescence. Abdomen subpetiolate, the second segment ferruginous, shining, punctured at the base; the sides and the margins of the four apical segments ciliated with glittering pale pubescence; beneath, the second segment covered with large distant punctures, the margins of the segments ciliated with pale glittering pubescence.

Hab. West Africa (Whydah).

112. MUTILLA CYPARISSA. B.M.

Male. Length 5 lines.—Head and thorax black, eyes notched, abdomen ferruginous; the head and thorax above densely clothed with short bright orange pubescence; the tegulæ covered with, and a line beneath the wings of similar pubescence; wings yellow-hyaline at the base, the apical half dark fuscous; the four apical segments of the abdomen black; the apical margins of all the segments ciliated with short pale glittering pubescence.

Hab. West Africa (Whydah).

113. MUTILLA CHARAXUS. B.M.

Male. Length 8 lines.—Black, the eyes emarginate; head and thorax rugose, thinly covered with a scattered black pubescence; the mesothorax having a central longitudinal shining carina and a deep elongate groove on each side not reaching the anterior margin; the scutellum elevated, its apex having a small elevated shining tubercle; the metathorax covered with large shallow punctures, channeled in the middle, its lateral margins having a raised shining carina; the wings deep brown, with a bright violet iridescence. Abdomen: the second segment obscurely ferruginous, shining and finely punctured, the punctures distant on the middle of the second segment, the third having a yellowish-white fascia, more or less interrupted, on its apical margin.

Hab. Sierra Leone. (The Rev. D. F. Morgan.)

114. MUTILLA ALECTO. B.M.

Male. Length 7½ lines.—Black, the eyes emarginate, the mandibles having a ferruginous spot near their tips. The prothorax, metathorax and scutellum ferruginous; the latter elevated, and having a grooved carina above, not reaching the base; the mesothorax rugose, and having a central longitudinal carina

and two impressed lines on each side, touching the posterior, but not extending to the anterior, margin; the metathorax covered with large shallow punctures and rounded at its lateral margins; wings dark brown, and having a purple iridescence. Abdomen shining, finely and distantly punctured, its extreme apex slightly ferruginous.

Hab. Sierra Leone. (The Rev. D. F. Morgan.)

115. MUTILLA PYTHIA. B.M.

Female. Length 6½ lines.—Head and abdomen black, thorax ferruginous; head coarsely rugose, swollen behind the eyes, the hinder angles rounded; the margin of the vertex, cheeks, and parts of the mouth have a thin griseous pubescence, the front sprinkled with erect short black hairs. Thorax oblong-quadrate, very coarsely longitudinally rugose; the lateral margins of the metathorax denticulate; the intermediate and posterior tibiæ have externally a double row of short spines, the legs thinly clothed with a pale glittering pubescence. Abdomen thinly clothed with black pubescence; the three basal segments have on their apical margins a fascia of glittering yellowish-white pubescence; the second segment beneath is transversely elevated in the middle and armed with three blunt teeth.

Hab. Port Natal.

116. MUTILLA CEPHEUS. B.M.

Female. Length 6 lines.—Head and abdomen black, thorax ferruginous, the head and thorax very coarsely rugose, the head rather wider than the thorax, rounded behind; thorax oblong-quadrate, slightly narrowed behind; the legs have a sparing pale glittering pubescence, that on the tarsi beneath brown. Abdomen longitudinally rugose, the basal segment has on each side an oblique patch of glittering yellowish-white pubescence; the third segment is covered with pubescence of the same colour interrupted in the middle.

Hab. Port Natal.

117. MUTILLA ACHERON. B.M.

Male. Length 10 lines.—Entirely black, the eyes emarginate, the head much narrower than the thorax; the mesothorax having a central longitudinal carina and two shorter ones on each side; the metathorax widened posteriorly, and having in the middle a longitudinal grooved carina, on each side of which is an irregular reticulation; wings deep brown-black, having a violet iridescence; the first submarginal cell has a curved transverse hyaline

streak, a similar streak crosses the second transverse nervure, not extending to the middle of either the second or third submarginal cells; there is also a small hyaline spot on the upper part of the third discoidal cell. Abdomen: the base, sides and apex, as well as the apical margins of the segments, covered with black pubescence; the second segment shining, punctured at the basal margin and tinged with blue.

Hab. Port Natal.

118. MUTILLA SYCORAX. B.M.

Female. Length 8 lines.—Head and abdomen black, thorax dark ferruginous; the head covered with large confluent punctures, and elongated behind the eyes. Thorax elongate, rounded in front and behind, the sides furnished with three tubercles; above coarsely rugose, legs black, and having a very sparing short pale glittering pubescence. Abdomen thinly clothed with short black pubescence, the second segment having two round spots of white pubescence, the third segment has a fascia of the same colour interrupted in the middle; beneath, the second segment is rugose and has a central carina at the base, which in the middle of the segment terminates in a sharp tooth.

Hab. Port Natal.

This species resembles the *M. leucopyga* of Klug, but differs in the form of the head, in the coarseness of its sculpture, and in the armature of the second segment beneath.

119. MUTILLA TRIMACULATA.

Mutilla trimaculata, *St. Farg. Hym.* iii. 618. 37 ♀.

Hab. Senegal.

120. MUTILLA SPINIGERA.

Mutilla spinigera, *St. Farg. Hym.* iii. 630. 53 ♂.

Hab. Senegal.

121. MUTILLA NIGRIPENNIS. B.M.

Mutilla nigripennis, *Oliv. Ency. Méth.* viii. 55. 5.

Hab. Senegal; West Africa (Whydah).

122. MUTILLA HISTRIO.

Mutilla histrio, *St. Farg. Hym.* iii. 631. 55 ♂.

Hab. Senegal.

123. MUTILLA FLABELLATA.

Mutilla flabellata, *Fabr. Syst. Piez.* p. 431. 12 ♂.
Oliv. Ency. Méth. viii. 59. 24.
Psammotherma flabellata, *Latr. Crust. Ins.* ii. 315, note.
St. Farg. Hym. iii. 592. 1.

Hab. Senegal.

124. MUTILLA TELAMON.

Male. Length 6 lines.—Black, eyes emarginate, the head much narrower than the thorax; the prothorax and mesothorax obscure ferruginous above; the scutellum produced, and having at its apex an elevated ferruginous tubercle; the metathorax covered with large shallow confluent punctures; wings blackish-brown; a hyaline streak crosses the first submarginal cell in the middle, traverses the second submarginal cell longitudinally, and enters the third submarginal, not extending beyond the middle; there is also a hyaline spot in the third discoidal cell. Abdomen: the two basal segments obscure ferruginous, the apical margin of the second black, and having a fascia of black pubescence; the third and fourth segments covered with yellowish-white pubescence, having a black line down the middle of each, the fifth and sixth segments clothed with black pubescence, the apical one with yellowish-white.

Hab. The Gambia. (Coll. F. Smith.)

125. MUTILLA BRUCEI.

Mutilla Brucei, *Guér. Voy. Abyss. Lefeb.* vi. 353. t. 7. f. 8 ♀.

Hab. Abyssinia.

126. MUTILLA GUINEENSIS.

Mutilla Guineensis, *Fabr. Ent. Syst.* ii. 367. 3 ♀; *Syst. Piez.* p. 429. 4.
Oliv. Ency. Méth. viii. 56. 7.
St. Farg. Hym. iii. 640. 69.

Hab. Guinea.

127. MUTILLA MEDON. B.M.

Male. Length 7 lines.—Black, the eyes emarginate; the face below the insertion of the antennæ covered with yellowish-white pubescence. Thorax rugose, the mesothorax having a central longitudinal slightly elevated carina and a deep elongate groove on each side, not extending to the anterior margin; the scutel-

lum produced, and having in the middle a smooth shining tubercle; the metathorax rounded at the sides, covered with large shallow punctures; wings brown-black with a violet iridescence; legs thinly clothed with cinereous pubescence, the scutellum has a fringe of the same colour. Abdomen smooth and shining, punctured at the sides, nearly impunctate down the middle; the second segment has on each side at its base a large ovate spot, and all the segments have an interrupted broad fascia of silvery-white pubescence.

Hab. Congo.

128. MUTILLA MEROPE. B.M.

Female. Length 7 lines.—Black, head very small, much narrower than the thorax, the face and vertex thinly sprinkled with short silvery pubescence. Thorax oblong, slightly narrowed behind, very coarsely rugose, of a deep obscure red; the anterior tarsi furnished externally with long black spines, the intermediate and posterior tibiæ very spinose externally, and the apex of the joints of the tarsi furnished with long, black spines; the calcaria dark rufo-piceous. Abdomen clothed with short black pubescence, the second segment having at the base a central large hexagonal spot, and two larger spots at its apex, rounded within, and nearly meeting in the centre, of dark orange-coloured pubescence; the fourth and fifth segments are covered with pubescence of the same colour; beneath, the second segment is coarsely rugose and has a central short longitudinal carina at the base; the margins of the segment ciliated with glittering golden hairs; the entire insect sprinkled with long black hairs.

Hab. South Africa.

129. MUTILLA MEPHITIS. B.M.

Female. Length 5½–6½ lines.—Head and abdomen black, thorax ferruginous; head coarsely rugose and having a thinly scattered glittering pale pubescence. Thorax rugose, the sides and also beneath sometimes dusky; the form is oblong, having on each side, before the middle, an obtuse tubercle, in some examples nearly obsolete; the legs covered with a long loose silvery-white pubescence; the intermediate and posterior tibiæ have externally a double row of long black spines, the spines which arm the apex of the joints of the tarsi are also black; the calcaria and claws ferruginous. Abdomen coarsely rugose and clothed with short black pubescence; the basal segment above, an ovate spot at the base of the second, and four spots placed

transversely at the apex of the segment, of glittering silvery-white pubescence; the fifth segment has also a similar spot in the middle, sometimes extending on to the fourth segment; beneath, the second segment is very coarsely rugose, and has at the base a central carina which does not extend to the apex of the segment; the following segments are very finely punctured; the entire insect thinly sprinkled over with long black hairs.

Hab. Interior of South Africa.

130. MUTILLA CELÆNO. B.M.

Female. Length 5 lines.—Black, head and thorax covered with large confluent punctures; the vertex, cheeks, a spot before the eyes and the flagellum ferruginous, the latter dusky above. The thorax and apical joints of the tarsi ferruginous; the legs have a pale glittering pubescence. Abdomen longitudinally rugose, and having a thinly scattered black pubescence; all the segments have a fringe of glittering yellowish-white pubescence.

Hab. Interior of South Africa.

131. MUTILLA ATROPOS. B.M.

Male. Length 7½ lines.—Black, the eyes emarginate, the head rugose. Thorax coarsely rugose; the prothorax clothed with black pubescence; the scutellum elevated and sparingly covered with black pubescence; the metathorax covered with shallow elongate impressions and having a central longitudinal carina; wings deep brown with a purple iridescence. Abdomen shining, not very strongly punctured, thinly covered with black pubescence, the pubescence most dense at the base and apex; the third segment covered with white pubescence; the apical segment has a small patch of white pubescence in the middle.

Hab. Port Natal.

132. MUTILLA ASTARTE. B.M.

Female. Length 9 lines.—Head and abdomen black, thorax ferruginous. Head very large, wider than the thorax, rounded at the sides, the cheeks produced; longitudinally coarsely rugose; the sides, mouth and vertex thinly covered with cinereous pubescence. Thorax oblong and slightly narrowed behind, coarsely longitudinally rugose; the legs have a short griseous pubescence, the intermediate and posterior tibiæ having externally a double row of short spines. Abdomen clothed with short black pubescence; the basal segment having on each side a patch,

and the third segment a band of yellowish-white pubescence, the latter interrupted in the middle.

Hab. South Africa (Negro Land).

133. MUTILLA ABDOMINALIS. B.M.

Mutilla abdominalis, *Westw. Arc. Ent.* ii. 19. 11 ♂. t. 53. f. 1.

Hab. Australia.

134. MUTILLA AFFINIS. B.M.

Mutilla affinis, *Westw. Arc. Ent.* ii. 18. t. 54. f. 2 ♀.

Hab. New Holland.

135. MUTILLA APICALIS.

Male. Length 4 lines.—Black, eyes ovate, antennæ and mandibles ferruginous, the tips of the latter and the two apical joints of the former black. Thorax coarsely punctured, the metathorax and legs ferruginous; wings fusco-hyaline, palest at their base. Abdomen petiolate, the petiole ferruginous; the three basal segments fringed with a few cinereous hairs, the two following segments have a black fringe; the apical segment ferruginous and having a thin glittering pubescence.

Hab. New South Wales. (Coll. W. W. Saunders, Esq.)

136. MUTILLA AURATA.

Mutilla aurata, *Fabr. Ent. Syst.* ii. 368. 8 ♀; *Syst. Piez.* p. 430. 9.
Oliv. Ency. Méth. viii. 56. 10.
Westw. Arc. Ent. ii. 18. 4.

Hab. New Holland.

137. MUTILLA AUSTRALASIÆ.

Mutilla Australasiæ, *Fabr. Syst. Piez.* p. 433. 25 ♀.
Oliv. Ency. Méth. viii. 62. 41.
Westw. Arc. Ent. ii. 18. 6.

Hab. New Holland.

138. MUTILLA FORMICARIA. B.M.

Mutilla formicaria, *Fabr. Ent. Syst.* ii. 368. 6; *Syst. Piez.* ♀, *and Cab. Mus. Dom. Banks.*
Oliv. Ency. Méth. viii. 56. 9.
Westw. Arc. Ent. ii. 17. t. 53. f. 6.

Hab. New Holland.

139. MUTILLA IGNITA. B.M.

Female. Length 4 lines.—Head brassy-green, the mandibles ferruginous, their tips black. Thorax oblong-ovate, slightly narrowed behind; roughly punctured above and of a blue-green; legs coppery, and having a scattered hoary pubescence. Abdomen coppery, having a purple tinge; very glossy, finely punctured; the first and second segments have a fringe of white pubescence on their apical margins; the three following segments have a few white hairs in the centre; the three apical segments have a long thin fuscous pubescence.

Hab. New Holland.

140. MUTILLA NIGROÆNEA. B.M.

Female. Length 5 lines.—Head and thorax nigro-æneous, the former very closely punctured, the antennæ and mandibles rufo-testaceous, the scape bright ferruginous at the base beneath. The thorax above covered with large deep punctures; slightly narrowed posteriorly, not armed with spines at the sides; the legs bright red. Abdomen dark metallic green, shining and finely punctured, the apical margins of the segments thinly fringed with pale hairs.

Hab. New Holland.

141. MUTILLA ROBUSTA.

Male. Length 6 lines. — Black, the head densely covered with confluent punctures and having a thinly scattered black pubescence, the eyes slightly emarginate. Thorax much broader than the head, ferruginous, closely and coarsely punctured, the sutures of the prothorax, scutellum and metathorax deeply impressed; the wings dark fuscous, palest at their base, the nervures ferruginous; the legs have a thin pale yellow pubescence. Abdomen shining and rather finely punctured, the apical margins of the three basal segments have a broad fascia of pale golden pubescence; the apical segment rugose and armed with two sharp spines; the entire abdomen beneath, as well as the breast, black.

Hab. New Holland. (Coll. F. Smith.)

142. MUTILLA RUFICORNIS.

Mutilla ruficornis, *Fabr. Ent. Syst.* ii. 369; *Syst. Piez.* p. 431. *Oliv. Ency. Méth.* viii. 59. 25.
Westw. Arc. Ent. ii. 18. 5.

Hab. New Holland.

143. MUTILLA VIRIDATIS.

Male. Length 3¼ lines.—Bright green, the legs, vertex and tegulæ bluish; the eyes rounded and very prominent; the head and thorax coarsely punctured; the wings subhyaline, their nervures fuscous; the legs have a scattered long white pubescence, the calcaria white. Abdomen covered with deep elongate punctures, the basal segment subpetiolate; the apical segments thinly covered with long black pubescence; beneath, the second segment covered with large deep punctures.

Hab. New Holland. (Coll. F. Smith.)

144. MUTILLA RUGICOLLIS. B.M.

Mutilla rugicollis, *Westw. Arc. Ent.* ii. 17. t. 53. f. 5 ♀.

Hab. New Holland (Hunter River).

145. MUTILLA DISTINGUENDA. B.M.

Female. Length 6 lines.—Black, the head and thorax coarsely rugose, the clypeus and cheeks having a little long cinereous pubescence, that on the thorax beneath, and on the legs, is also cinereous, on the latter intermixed with fuscous above; the thorax is rounded in front, and has on each side, a little before the middle, a stout tooth; narrowed towards the abdomen, and having above a long thin black pubescence. Abdomen: the second segment above red, the entire abdomen having a thin black pubescence; the fourth and fifth segments have a spot of silvery-white pubescence in the centre of their apical margins; beneath, the second and following segments are ciliated with cinereous hairs.

Hab. Western Australia.

146. MUTILLA LACINIA. B.M.

Male. Length 5 lines.—Black, head and thorax closely and coarsely punctured; the metathorax rugose; the eyes ovate, the scape, vertex and cheeks fringed with pale pubescence, the face below the antennæ also covered with long loose white pubescence; the basal joint of the flagellum obscurely ferruginous; the tegulæ and legs ferruginous; the thorax and legs thinly scattered over with pale hairs, intermixed with black ones on the disk of the former; wings subhyaline, their apical margins dark fuscous. Abdomen shining and deeply punctured, subpetiolate, the four basal segments thinly sprinkled over with long pale

hairs, the apical ones with black hairs; the apical margins of the four basal segments fringed with pale pubescence.

Hab. North-west coast of Australia.

147. MUTILLA PERPLEXA. B.M.

Female. Length 5¼ lines.—Black, coarsely rugose, the vertex covered with pale yellow pubescence, the scape covered with pale pubescence. Thorax slightly narrowed posteriorly, and thinly sprinkled over with long black pubescence, the legs thinly covered with glittering pale hairs; the intermediate and posterior tibiæ armed exteriorly with stout acute spines. Abdomen: the base thinly clothed with pale pubescence, a patch of the same in the middle of the second segment, its apical margin also fringed with pale pubescence; the fourth and fifth segments have also a little patch of pale pubescence in the middle on their apical margins; the entire abdomen above, particularly towards the apex, sprinkled with long black hairs; the margins of the segments beneath fringed with glittering silvery pubescence.

Hab. Australia (North-west coast).

148. MUTILLA RUBELLA. B.M.

Female. Length 7 lines.—Obscurely red; the antennæ, eyes, legs and breast nearly black; the entire insect coarsely rugose; a patch of golden-coloured pubescence on the vertex; the anterior angles of the thorax acute, the sides unarmed; posteriorly narrowed, the sides compressed; the legs have a scattered pale pubescence beneath; the intermediate and posterior tibiæ furnished with a row of sharp spines exteriorly, which are intermixed with black pubescence; the tarsal joints spinose at their apex, and having a mixture of dark and pale pubescence, most sparing on the anterior pair; the thorax above as well as the abdomen thinly clothed with black pubescence; the latter having a spot at the apex of the basal segment in the centre, an elongate patch down the centre of the second, occupying a deep depression, a spot on its apical margin, as well as on those of the three following, of golden-coloured pubescence.

Hab. North-west coast of Australia.

149. MUTILLA VENUSTA. B.M.

Female. Length 5 lines.—Black, head and thorax closely and coarsely punctured, the tubercle at the base of the scape, a spot at the base of the clypeus, and the middle of the mandibles red; the thorax above and a large ovate macula on each side of the second segment of the abdomen red; the anterior margin of

the thorax black; the entire insect has a thinly scattered griseous pubescence, most dense on the legs and on the margins of the abdominal segments beneath, the tarsi rufo-testaceous; the third and two following segments have a patch of silvery pubescence in the centre above, and the apical segment is obscurely red and finely longitudinally aciculate.

Hab. Western Australia (Perth).

150. MUTILLA INSTABILIS. B.M.

Female. Length 3 lines.—Black, head rugose, the tubercles at the base of the antennæ and the mandibles ferruginous, the latter sometimes obscurely so. Thorax: sometimes the disk is ferruginous, but more frequently black; thickly covered with deep elongate punctures, those on the posterior portion of the disk very large and subconfluent; the tarsi ferruginous. Abdomen densely covered with large deep longitudinal punctures; the second segment above ferruginous, the margins black, the apical segment aciculate above.

Hab. Australia (King George's Sound; Swan River).

151. MUTILLA MOROSA. B.M.

Mutilla morosa, *Westw. Arc. Ent.* ii. 19. 12. t. 54. 1 ♂.

Hab. Australia (Swan River).

152. MUTILLA STRIGOSA. B.M.

Female. Length 4¼ lines.—Black, the head rugose and having a thinly scattered glittering pale pubescence, interspersed with a few long black hairs; the flagellum beneath and the mandibles ferruginous. Thorax ferruginous, its anterior margin black; the disk deeply longitudinally strigose; the legs black, the knees and base of the tarsi rufo-testaceous. Abdomen shining, longitudinally rugose, the apical margins of the segments fringed with glittering pale golden pubescence; the apical segment obscurely ferruginous and longitudinally aciculate.

Hab. Australia (Swan River).

153. MUTILLA LUTARIA. B.M.

Female. Length 5 lines.—Rufo-testaceous, head and thorax coarsely punctured, the abdomen more finely so; the entire insect clothed above with golden pubescence; the scape of the antennæ, eyes and mandibles black; the femora fuscous; the tarsi and the tibiæ externally very spinose, the spines black; the extreme

base and apex of the abdomen black; the apical segment longitudinally strigose.

Hab. Swan River.

154. MUTILLA CORDATA. B.M.

Female. Length 2½–3 lines.—Black, head strongly punctured, antennæ and mandibles red, the scape fuscous. Thorax heart-shaped, ferruginous, strongly but not very closely punctured; the legs ferruginous, the femora sometimes fuscous; the thorax above having a few scattered long black hairs, those on the legs mixed with silvery ones. Abdomen shining, closely punctured, the apical margin of the basal segment pale testaceous; an oblong patch of pale glittering pubescence in the centre of the third and two following segments, sometimes extending to the middle of the second segment; the entire abdomen has a scattered black pubescence above; at the base and beneath it is pale; the apical segment above obliquely striated on each side.

Var. The thorax black.

Hab. Australia (Adelaide).

155. MUTILLA MACULATA. B.M.

Female. Length 2¼ lines.—Black, the head thinly sprinkled with short golden hairs; the flagellum and mandibles, the tibiæ, coxæ, tarsi and abdomen beneath ferruginous; the thorax above obscurely ferruginous, thinly sprinkled with long erect black hairs. Abdomen: the apical margin of the basal segment and a large elongate-ovate macula on the second segment pale rufo-testaceous, the latter covered with short golden pubescence, towards the apex clothed with long black pubescence.

Hab. Australia (Adelaide).

This species appears to be closely allied to the *M. aurata* of Fabricius, if indeed it be not a variety of that species.

156. MUTILLA METALLICA. B.M.

Female. Length 5 lines.—Head and thorax metallic green, the head closely and strongly punctured; the thorax above covered with large deep punctures; the pubescence on the cheeks, clypeus and scape cinereous, the antennæ dark testaceous; legs of a metallic purple and having a scattered cinereous pubescence. Abdomen metallic purple, coarsely punctured at the base, more finely so towards the apex, having a thin long black pubescence; the first and second segments have a spot of silvery-white pubescence on their apical margins in the centre;

beneath coarsely punctured, the segments ciliated with white pubescence.

Hab. Australia (Adelaide).

157. MUTILLA MODESTA. B.M.

Female. Length 5½ lines.—Black, the head and thorax covered with large confluent punctures; the vertex and cheeks have a thin silvery pubescence, a tuft of the same in front of the eyes; the head, thorax and abdomen above have a thinly scattered long black pubescence; the legs, thorax and abdomen beneath have a thin long white pubescence. The basal segment of the abdomen has a central spot of white pubescence, a circular spot of the same in the middle of the second segment, and a spot on its apical margin; the fifth segment has a little tuft of white pubescence on its apical margin in the centre, and there is a similar tuft at the extreme lateral apical margin of the second segment; the second and third segments beneath are fringed with white pubescence.

Hab. Australia (Adelaide).

158. MUTILLA PULCHELLA. B.M.

Female. Length 4 lines.—The head and thorax ferruginous, with a beautiful violet iridescence, moderately punctured, and having a thinly scattered black pubescence; the scape, cheeks and thorax beneath have a thin cinereous pubescence; the eyes black and prominent; thorax rounded anteriorly, much narrowed posteriorly; the legs sometimes of a bright violet tint, or ferruginous with a violet iridescence; the tarsi thickly covered with cinereous pubescence; the tibiæ and femora have a scattered cinereous pubescence; the coxæ, trochanters, base of the femora and the thorax beneath ferruginous. Abdomen of a metallic purple, the second and following segments having down the centre a line of silvery pubescence.

Hab. Australia (Moreton Bay; Adelaide).

159. MUTILLA QUADRATA. B.M.

Female. Length 4½ lines.—Head rugose, on the vertex a little golden pubescence; the antennæ, mandibles, thorax and legs ferruginous; the latter oblong-quadrate, slightly compressed posteriorly, very coarsely rugose above, and having a scattered golden pubescence; the sides and femora above rufo-piceous. Abdomen thinly clothed with black pubescence, a spot of glittering silvery pubescence on the basal segment, an ovate one on

each side of the second segment about the middle, and a third touching its apical margin; beneath rufo-piceous, the margins of the segments fringed with pale glittering pubescence.

Hab. Australia (Adelaide).

160. MUTILLA CARBONARIA. B.M.

Male. Length 4 lines.—Jet-black, head and thorax coarsely punctured, most deeply so on the metathorax; the eyes ovate, the face below the antennæ covered with long white pubescence, the scape fringed with the same; the vertex has a mixture of black and white pubescence; the entire insect beneath, as well as the legs, sparingly covered with white hairs, on the legs above intermixed with black; the wings subhyaline, their apical margins having a broad fuscous cloud. Abdomen shining, strongly punctured, the apical margins of the segments thinly fringed with white hairs, the entire surface above sprinkled with black ones; the apical margin of the basal segment narrowly pale testaceous.

Hab. Van Diemen's Land.

161. MUTILLA CONCINNA. B.M.

Mutilla concinna, *Westw. Arc. Ent.* ii. 19. 13. t. 53. f. 3 ♀.

Hab. Van Diemen's Land.

162. MUTILLA DORSIGERA. B.M.

Mutilla dorsigera, *Westw. Arc. Ent.* ii. 18. t. 53. f. 4 ♀.

Hab. Van Diemen's Land.

163. MUTILLA ELEGANS. B.M.

Mutilla elegans, *Westw. Arc. Ent.* ii. 19. 10. t. 53. f. 2 ♂.

Hab. Van Diemen's Land.

164. MUTILLA LATERALIS.

Mutilla lateralis, *Westw. Arc. Ent.* ii. 18. 9. t. 54. f. 3 ♀.

Hab. Van Diemen's Land.

165. MUTILLA ANALIS.

Mutilla analis, *St. Farg. Hym.* iii. 630. 52.

Hab. India.

166. MUTILLA ANTENNATA. B.M.

Male. Length 4 lines.—Head and abdomen black, thorax red; eyes emarginate; the antennæ fusco-ferruginous, longer than the head and thorax; mandibles in the middle, and palpi ferruginous. Thorax: the legs black; the mesothorax distantly but coarsely punctured, the metathorax covered with large shallow punctures, having a smooth channel down the centre, which has on each side an elevated carina; the tegulæ large, rounded posteriorly; wings subhyaline, slightly fuscous towards their apical margins. Abdomen covered with large distant punctures, the apical margins fringed with long pale glittering pubescence; the entire insect is thinly sprinkled with pale glittering hairs.

Hab. India.

167. MUTILLA ARGENTIPES.

Female. Length 5½ lines.—Black, the vertex having an ovate spot of silvery-white pubescence, the cheeks clothed with the same. Thorax: the disk obscurely ferruginous, clothed with reddish-yellow pubescence, having a golden gloss; the sides armed with a stout tooth, a little before the middle; the legs have a silvery pubescence. Abdomen: the basal segment has a spot of silvery pubescence, and the basal margin of the second segment has also a little of the same, beyond which it is clothed with reddish-yellow; its apical margin clothed with black, and having three ovate spots of silvery-white; the three following segments have a central spot of the same colour; beneath ferruginous, the margins of the segments fringed with silvery hairs.

Hab. India.

168. MUTILLA AURIFRONS.

Female. Length 5 lines.—Brownish-red, the sides of the thorax and abdomen having some dusky stains; the face and vertex densely clothed with short bright golden pubescence; the antennæ ferruginous, having the flagellum fuscous above, except the two or three basal joints. Thorax elongate-ovate, slightly narrowed behind; legs bright ferruginous and having a pale glittering pubescence. Abdomen: the second segment having two minute spots of golden pubescence, its apical margin having a fascia of yellowish-white pubescence and being notched in the middle; the following segments have a thick marginal fringe of bright reddish-yellow pubescence.

Hab. India. (Coll. W. W. Saunders, Esq.)

169. MUTILLA BENGALENSIS.

Mutilla Bengalensis, *St. Fary. Hym.* iii. 637. 63 ♀.

Hab. Bengal.

170. MUTILLA BLANDA. B.M.

Female. Length 3–3½ lines.—Head and abdomen black, thorax red; cheeks, mouth and scape rufo-piceous; the head thinly clothed with short bright silvery hairs; thorax oblong, rugose, legs more or less rufo-piceous, the tarsi palest; the calcaria white; the legs have a thin, long, glittering silvery pubescence. Abdomen clothed with short black pubescence; the second segment has an ovate spot of short silvery pubescence at its basal margin, in the centre, and another at its apical margin; the second segment clothed with silvery pubescence; the apical segment ferruginous above, striated obliquely on each side from the middle; the entire abdomen thinly sprinkled with long, glittering, silvery hairs.

Hab. India.

171. MUTILLA DIVERSA.

Female. Length 4½ lines.—Head and thorax red, the former rounded at the sides and narrowed anteriorly; antennæ and mandibles red; the legs red, and having a thin pale glittering pubescence; the head, and the thorax above thinly covered with erect black hairs. Abdomen black; the basal segment having a patch, and the second and third segments an ovate spot on each side on their apical margins, of pale golden pubescence; beneath obscure red.

Hab. India. (Coll. F. Smith.)

This species resembles the *M. erythrocephala*, but the head is of a different form, being rounded, not subquadrate as in that species, and instead of bands it has only spots on the margins of the abdominal segments.

172. MUTILLA DIVES.

Female. Length 2–4 lines.—Black, the vertex sometimes obscurely ferruginous; the thorax above and the metathorax ferruginous; the legs dark rufo-piceous, the tarsi palest; the pubescence on the legs pale and glittering; the calcaria white. Abdomen: the second segment has two elongate-ovate spots of rich golden pubescence, placed laterally; the third segment has two quadrate bright silver spots; the fifth segment has a little silvery pubescence in the middle; beneath rufo-piceous.

Hab. India. (Coll. W. W. Saunders, Esq.)

173. MUTILLA GLABRATA.

Mutilla glabrata, *Fabr. Ent. Syst.* ii. 372. 25 ♀ ; *Syst. Piez.* p. 438. 45.
Oliv. Ency. Méth. viii. 65. 64.

Hab. India.

174. MUTILLA INDICA.

Mutilla Indica, *Linn. Syst. Nat.* i. 966. 3 ♀.

Hab. India.

175. MUTILLA INDOSTANA.

Male. Length 8½ lines.—Head, thorax, legs and basal segment of the abdomen black; wings dark fuscous; abdomen, except the base, red; head small, eyes emarginate; the metathorax narrowed at the base, obliquely truncate at the apex, covered with large shallow punctures; the apical margins of the segments of the abdomen fringed with ferruginous pubescence; the extreme apex fuscous.

Hab. Madras.

176. MUTILLA MIRANDA.

Male. Length 6 lines.—Head ferruginous, narrower than the thorax, eyes emarginate, antennæ black. Thorax: the prothorax and mesothorax ferruginous; the metathorax and thorax beneath as well as the legs black, the latter clothed with pale glittering pubescence; the metathorax broad, produced at its lateral angles; the wings brown, their base hyaline. Abdomen black, the second segment having on each side a large spot of white pubescence, the third and fourth segments clothed with white pubescence.

Hab. India. (Coll. W. W. Saunders, Esq.)

177. MUTILLA NIGRIPES.

Mutilla nigripes, *Fabr. Ent. Syst.* ii. 372. 28 ♀ ; *Syst. Piez.* p. 439. 51.
Oliv. Ency. Méth. viii. 66, 67.

Hab. India.

178. MUTILLA NOBILIS. B.M.

Male. Length 6½ lines.—Head and thorax ferruginous, eyes ovate, antennæ ferruginous, the flagellum beyond the two or three basal joints fuscous above; wings fuscous, subhyaline at

their base, the third submarginal and third discoidal cells have each a small hyaline spot; the metathorax black, and rounded posteriorly. Abdomen black; the basal segment, the apical margin of the second, and the third and fourth segments clothed with a rich golden pubescence.

Hab. Madras.

179. MUTILLA OPTIMA.

Female. Length 3 lines.—Head, thorax and legs ferruginous; the pubescence on the face silvery, that on the vertex gold-coloured; tips of the mandibles piceous. Thorax subovate, narrowed behind, thinly sprinkled with golden hairs, and having at the sides a few long black and also a few white ones; the legs have a glittering silvery pubescence; the spines which arm the intermediate and posterior tibiæ externally, and also those at the apex of the joints of the tarsi, black; the calcaria pale testaceous. Abdomen black; the basal joint red and having a spot above, a second ovate spot at the base of the second segment, and a third at its apex in the middle, and a larger one on each side, of bright glittering silvery pubescence; the third segment has a central spot of the same colour and brilliancy; beneath, rufo-piceous at the base, and having the apical margins of the second and third segments fringed with silvery-white pubescence.

Hab. India. (Coll. W. W. Saunders, Esq.)

180. MUTILLA OPULENTA. B.M.

Male. Length 6½ lines.—Black, the eyes emarginate, the mandibles, scape and labrum ferruginous; the head and thorax clothed with bright pale golden pubescence, a stripe of the same beneath the wings; the tegulæ, legs, and nervures of the wings ferruginous, the latter fusco-hyaline, their base hyaline. Abdomen: beneath and also the extreme base rufo-piceous; the apical margins of the segments, except the sixth and seventh, have a broad fascia of bright golden pubescence; the pubescence on the two apical segments black.

Hab. India.

181. MUTILLA PULCHRINA. B.M.

Female. Length 5½–6 lines.—Head and thorax red, deeply longitudinally rugose; the antennæ and legs nigro-piceous, the pubescence on the latter golden-yellow; the thorax armed on each side, before the middle, with a stout tooth, behind

which is a small round tubercle. Abdomen black, clothed with black pubescence; the basal segment has a small spot of bright golden pubescence, a broad fascia of the same colour occupies its apical margin and also the basal margin of the second segment; the band is emarginate on each side, forming an angle in the centre; the third and fourth segments clothed with bright golden pubescence, having a narrow longitudinal black line in the centre.

Hab. India (Madras).

Var. β. This species varies in having the anterior band and also the basal spot obsolete,—not caused apparently by being rubbed off.

Var. γ. The antennæ ferruginous, the thorax rufo-fuscous, the anterior band and spot obsolete.

182. MUTILLA REPRÆSENTANS. B.M.

Female. Length 2½–4½ lines.—Black, the extreme base and apex of the scape, and the mandibles in the middle ferruginous; the flagellum obscurely red beneath. Thorax red, oblong and longitudinally rugose; the legs have a cinereous pubescence, the spines which arm the intermediate and posterior tibiæ externally are ferruginous; the spines and also the pubescence at the apex of the joints of the tarsi fulvous; the calcaria pale testaceous. Abdomen clothed with short black pubescence, the second segment having two large ovate snow-white spots, placed laterally; the third and fourth segments clothed with snow-white pubescence, having a black longitudinal line down the centre; the lateral margins of the apical segments fringed with white pubescence, as are also the margins of the segments beneath.

Hab. India.

This species answers to the description of the *M. Halensis* of Fabricius, but can scarcely be identical, that species being from Saxony.

183. MUTILLA RETICULATA. B.M.

Female. Length 4½ lines.—Black, the head as wide as the thorax, subquadrate, the posterior angles rounded. Thorax obscurely ferruginous above, covered with large shallow octagonal fossulets, forming a regular octagonal reticulation. Abdomen: the apical margin of the basal segment fringed with bright yellowish-white pubescence, the second segment has a narrow mar-

ginal fringe, a central spot uniting with the fringe, and the third segment covered laterally with pale yellow pubescence.

Hab. India.

184. MUTILLA RUFIVENTRIS.

Female. Length 2-3 lines.—Head, thorax and legs ferruginous; head subovate, rather wider than the thorax, sparingly and finely punctured; antennæ ferruginous. Thorax oblong, longitudinally rugose; legs rufo-testaceous, varying in depth of colour and having a sparing glittering white pubescence. Abdomen: the basal segment has an ovate spot in the middle of its apical margin, and in the middle of the apical margins of the second and third segments is a half-circular spot of silvery-white pubescence; the entire abdomen thinly sprinkled with long white hairs; the extreme apex of the abdomen, as well as beneath, ferruginous.

Hab. India. (Coll. W. W. Saunders, Esq.)

185. MUTILLA RUFOGASTRA. B.M.

Mutilla rufogastra, *St. Farg. Hym.* iii. 629. 51 ♂.

Hab. India (Nepaul); China.

This species closely resembles *M. fuscipennis*, of which it may be a variety, but it differs in having the wings of a lighter colour, and hyaline at their base; its metathorax is narrowed posteriorly, whilst in *fuscipennis* it is widened.

186. MUTILLA RUGOSA.

Mutilla rugosa, *Oliv. Ency. Méth.* viii. 61. 35 ♀.

Hab. India.

187. MUTILLA SEMIAURATA.

Female. Length 5 lines.—Black, the head, mesothorax anteriorly, metathorax and legs clothed with silvery-white pubescence; the abdomen densely clothed with bright pale golden pubescence, except the apical segment, which is black and has a central silvery-white pubescent spot; beneath, the margins of the segments are fringed with silvery hairs, the second segment coarsely punctured and having a central longitudinal carina.

Male.—Clothed as in the other sex, the eyes ovate, wings dark fuscous, palest towards their base.

Hab. India. (Coll. W. W. Saunders, Esq.)

188. MUTILLA SEXMACULATA. B.M.

Mutilla sexmaculata, *Swed. Nov. Act. Holm.* viii. 286. 44 ♀ (1787).
Mutilla fuscipennis, *Fabr. Syst. Piez.* p. 436. 35 ♂.
Oliv. Ency. Méth. viii. 63. 50.
St. Farg. Hym. iii. 602. 10.

Hab. China; Java; India.

The sexes are united on the authority of Brigadier-General Hearsey, who captured them *in copulâ*, in the Punjaub in India.

189. MUTILLA AULICA. B.M.

Female. Length 3¼ lines.—Black, the head having a large round spot of silvery pubescence on the vertex. Thorax oblong, the mesothorax coarsely rugose and obscurely ferruginous; on the sides an oblong patch of silvery pubescence; the legs dark rufo-piceous, thinly sprinkled with silvery hairs. Abdomen thinly covered with black pubescence, at the sides and apex a few long black hairs; the second segment having on each side a narrow oblong spot, touching the base, and the third and fourth segments, an ovate spot on each side in a line with the oblong spots, of bright silvery pubescence; on the two apical segments a mixture of black and silvery hairs.

Hab. Northern India.

Var. *a*. The spot on the vertex nearly obsolete, and the thorax black.

190. MUTILLA FUNERARIA. B.M.

Female. Length 4 lines.—Deep black, the head, legs and antennæ thinly sprinkled with silvery hairs; the thorax oblong, slightly narrowed posteriorly. Abdomen of an opake black, the apical margin of the second segment having a lunate band of silvery pubescence; the two apical segments thinly sprinkled with a mixture of silvery hairs.

Hab. Northern India.

191. MUTILLA PUSILLA.

Female. Length 2 lines.—Head, thorax and legs ferruginous; head about the same width as the thorax, strongly punctured. Thorax oblong-quadrate, roughly punctured; legs pale rufo-testaceous, the femora, tibiæ and joints of the tarsi palest towards their base; the legs sprinkled with a bright glittering

silvery-white pubescence; the calcaria white. Abdomen black, the extreme base and apex ferruginous; the second segment having at the base a central ovate spot of golden pubescence, its apical margin fringed with silvery hairs, also a small spot of the same colour in the middle of the following segments; beneath, the margins of the segments fringed with silvery hairs.

Hab. Northern India. (Coll. W. W. Saunders, Esq.)

192. MUTILLA REGIA. B.M.

Female. Length 4 lines.—Head, antennæ, thorax and legs ferruginous; the mesothorax having at its anterior margin a transverse quadrate spot of bright silvery pubescence. Abdomen bright purple, the base and apex having a slight tinge of green; the second segment has a narrow oblong spot at its base, in the middle, and a larger ovate one at its apical margin, of bright silvery-white pubescence.

Hab. Northern India.

193. MUTILLA UNIFASCIATA. B.M.

Male. Length 7 lines.—Black, the head small, narrower than the thorax, eyes emarginate; the head, prothorax, metathorax and legs thinly clothed with cinereous pubescence; wings fuscous, subhyaline at their extreme base. Abdomen: the two basal segments red; the third densely clothed with very short silvery-white pubescence, the apical segments fringed with black.

Hab. Northern India.

194. MUTILLA CHINENSIS. B.M.

Female. Length 5 lines.—Head and abdomen black, thorax pale ferruginous; the scape, basal joint of the flagellum, palpi and mandibles pale ferruginous, the latter black at their tips; thorax oblong, the sides nearly parallel, longitudinally rugose; the legs pale ferruginous, thinly clothed with fulvous pubescence. Abdomen: the apical margin of the basal segment has a thin fringe, the second segment a central spot, and also a fascia on its apical margin, and the third segment has also a broad fascia, of bright gold-coloured pubescence; beneath, the margins of the segments fringed with bright golden hairs.

Hab. North China.

195. MUTILLA DESPONSA.

Male. Length 5 lines.—Head and abdomen black, thorax ferruginous; eyes ovate, the head and scape of the antennæ

thinly covered with pale yellow pubescence. Thorax: the legs and thorax beneath black, the base of the metathorax having more or less of a fuscous stain, the legs and sides of the thorax thinly clothed with pale yellow pubescence; the disk of the thorax thinly sprinkled with short fuscous hairs; wings dark fuscous; the tegulæ ferruginous. Abdomen petiolate, the apical margins of the three basal segments fringed with pale golden pubescence.

Hab. North China.

196. MUTILLA VARIEGATA. B.M.

Female. Length 6 lines.—Head, legs and abdomen black, the thorax red; head and thorax longitudinally rugose; the mouth, scape and legs have a thin long golden pubescence; the thorax transverse in front, the sides angular, the metathorax truncate; thinly sprinkled with black hairs on the disk, on the metathorax and beneath they are golden-yellow. Abdomen subpetiolate, a fascia on the apical margins of the three basal segments, and a rounded spot on the centre of the second segment, of short bright golden pubescence; beneath strongly punctured, above longitudinally rugose.

Hab. North China.

197. MUTILLA OCULATA. B.M.

Mutilla oculata, *Fabr. Syst. Piez.* p. 432. 19; *Ency. Méth.* viii. 60. 32.

Hab. Hong Kong.

198. MUTILLA SINENSIS. B.M.

Female. Length 6½ lines.—Head and abdomen black, the thorax ferruginous; the flagellum beneath and tips of the mandibles rufo-piceous; the flagellum adorned with sericeous pile. Thorax longitudinally rugose, having on each side, a little before the middle, an obtuse tooth, in front and behind which the margins are slightly emarginate; the metathorax rounded; the femora have a scattered, and the tibiæ and tarsi a dense golden pubescence. Abdomen: the second segment has at the base an angular spot of golden pubescence, and the third a broad band of the same colour; beneath, the segments are ciliated with golden hairs.

Male.—Similarly coloured to the female, with exception of the metathorax which is black; the eyes emarginate, the head narrower than the thorax; the tegulæ of the wings very large, their posterior margins rounded; wings fusco-hyaline, their apical mar-

gins having a dark cloud, also a fuscous stain at the apex of the externo-medial cell; the metathorax coarsely punctured, very broad, and produced on each side, forming an obtuse tooth; the abdomen has a fascia of golden pubescence on the third segment, and a transverse spot in the middle of the fourth of the same colour.

Hab. North China. (R. Fortune, Esq.).

199. MUTILLA SPECIOSA. B.M.

Female. Length 4 lines.—Head and thorax red, the former much narrower than the latter, both coarsely rugose; the antennæ ferruginous, the flagellum more or less fuscous above. Thorax subquadrate; legs rufo-piceous and having a sparing bright yellow pubescence; the tarsi sometimes ferruginous. Abdomen black, elongate and longitudinally rugose; the second segment having three ovate spots of golden pubescence placed transversely at the base of the segment; the third and fourth segments clothed with golden pubescence, usually more or less interrupted.

Hab. Hong Kong.

200. MUTILLA PHILIPPINENSIS.

Female. Length 6–6½ lines.—Head, legs and abdomen black, thorax ferruginous; head about the width of the thorax, the latter oblong and longitudinally rugose, the sides compressed, the legs having a thinly scattered pale glittering pubescence. Abdomen: the second segment having on each side towards its base an ovate spot of pale yellow pubescence; the third segment is covered with the same, and the fifth has a fringe of the same colour; the margins of the segments ciliated with pale glittering pubescence.

Hab. Philippine Islands.

201. MUTILLA AMERICANA. B.M.

Mutilla Americana, *Linn. Syst. Nat.* i. 966. 2.
Fabr. Syst. Ent. p. 396. 3; *Ent. Syst.* ii. 367. 5; *Syst. Piez.* p. 430. 6.
Oliv. Ency. Méth. viii. 56. 8.
St. Farg. Hym. iii. 623. 43.
Mutilla obsoleta, *Klug, Nova Acta Cæs. Curios.* x. 319. 22 ♀. t. 23. f. 7.

Hab. Brazil (Para).

202. MUTILLA ARMATA. B.M.

Mutilla armata, *Klug, Nova Acta Cæs. Curios.* x. 323. 27 ♀. t. 23. f. 12.

The variety received from the banks of the Tapajos has the head and thorax entirely black, and the spots and fasciæ which adorn the abdomen are of a rich gold colour; usually they are bright and silvery.

Hab. Brazil (Para and Rio Tapajos); Venezuela.

203. MUTILLA ARGYREA.

Mutilla argyrea, *Klug, Nova Acta Cæs. Nat. Curios.* x. 305. 1 ♂. t. 21. f. 10.

Hab. Brazil (Para).

204. MUTILLA ATRICEPS. B.M.

Female. Length 2-2½ lines.—Head black, thorax and abdomen rufo-testaceous, the latter usually of a deeper red; roughly punctured, the punctures more or less confluent on the head and thorax, the lateral margins of the thorax crenulated; the scape and two or three of the basal joints of the flagellum rufo-testaceous, the mandibles ferruginous; the legs slightly fuscous. Abdomen: the second segment has on each side a stripe of silvery pubescence not extending to the apical margin, on which is a spot united to a line which on each side extends to the apex of the abdomen; the spots on the second segment sometimes united, forming a transverse line; the entire insect thinly sprinkled over with long fuscous hairs.

Hab. Brazil (Para; Santarem). (H. W. Bates.)

205. MUTILLA CONSANGUINEA.

Female. Length 2½ lines.—Rufo-testaceous, thinly clothed with short golden pubescence, head rounded behind, eyes large and prominent. Thorax oval, having on the mesothorax two fuscous spots anteriorly and two posteriorly. Abdomen: the second segment has a transverse fuscous band a little beyond the middle, emitting a central stripe which extends to the base of the segment; the four apical segments have on each side a small fuscous spot or stain; the entire insect thinly sprinkled with long glittering yellow hairs.

Hab. Brazil (Para). (Coll. F. Smith.)

This species very closely resembles *M. fidicula*, but differs in the form of the head and thorax.

206. MUTILLA CRUCIATA. B.M.

Female. Length 3 lines.—Head and thorax ferruginous, the former quadrate, the posterior angles acute; the cheeks produced into an obtuse spine; the posterior margin of the vertex and the sides of the head fuscous; the vertex more or less adorned with silvery pile; the antennæ rufo-fuscous. Thorax fiddle-shaped, the lateral margins denticulate; legs rufo-testaceous, differing in depth of colouring. Abdomen: the base more or less rufo-testaceous, a central narrow line of silvery pubescence runs from base to apex, and a transverse fascia crosses the second segment a little within the apical margin.

Hab. Brazil (Para).

207. MUTILLA DIADEMA. B.M.

Mutilla Indica, *Linn. Syst. Nat.* i. 966. 3.
Mutilla diadema, *Fabr. Ent. Syst.* ii. 367. 4; *Syst. Piez.* p. 429. 5.
Oliv. Ency. Méth. viii. 55. 2.
Gmel. Ed. Syst. Nat. i. 2805. 10.
Latr. Act. Soc. Hist. Nat. Par. i. 7. 1.
Klug, Nova Acta Cæs. Curios. x. 314. 15 ♀. t. 22. f. 12.
St. Farg. Hym. iii. 619. 39.

Hab. Brazil (Para); Surinam; Demerara.

208. MUTILLA FENESTRATA.

Mutilla fenestrata, *Klug, Nova Acta Cæs. Curios.* x. 311. 11. t. 22. f. 8.

Hab. Brazil (Para).

209. MUTILLA GRACILIS. B.M.

Male. Length 3½ lines.—Black, the head covered with a thin griseous pubescence, on the clypeus it is silvery-white; the prothorax is thinly clothed with short silvery pubescence, but on the metathorax and beneath the wings it is dense, and bright silvery-white; the eyes emarginate; wings hyaline, their apical margins slightly clouded, the tegulæ large, produced behind, and having a sharp ridge down the middle; the mesothorax roughly sculptured; the basal segment of the abdomen and the apical margin of the second segment covered with bright silvery-white pubescence; the entire abdomen having a scattered long silvery pubescence.

Hab. Brazil (Para). (H. W. Bates.)

210. MUTILLA LARVATA. B.M.

Mutilla larvata, *Klug, Nova Acta Cæs. Curios.* x. 310. 9. t. 22. f. 6.

Hab. Brazil (Para).

211. MUTILLA LINEOLA.

Mutilla lineola, *Fabr. Syst. Piez.* p. 437. 42.
Oliv. Ency. Méth. viii. 65. 61.
Klug, Nova Acta Cæs. Nat. Curios. x. 307. 4 ♀. t. 22. f. 1.

Hab. Brazil (Para).

212. MUTILLA LUSCA.

Mutilla lusca, *Klug, Nova Acta Cæs. Curios.* x. 321. 25 ♀. t. 23. f. 10.

Hab. Brazil (Cameta; Para). (Coll. F. Smith.)

213. MUTILLA NIGRELLA. B.M.

Male. Length 6 lines.—Black, head subquadrate, wider than the thorax, the latter as well as the head thickly covered with confluent punctures; the clypeus and the scape of the antennæ ciliated with silvery hairs; eyes ovate, the cheeks armed with a long stout spine. Thorax: the metathorax thickly clothed with long silvery pubescence; the legs have also a silvery pubescence, the calcaria white; the wings fuscous, having a slight purple iridescence, their extreme base subhyaline. Abdomen petiolate, shining and finely punctured, the apical margin of the basal segment fringed with silvery pubescence.

Hab. Brazil (Para). (H. W. Bates.)

214. MUTILLA OBLIQUATA. B.M.

Mutilla obliquata, *Klug, Nova Acta Cæs. Curios.* x. 311. 10. t. 22. f. 7.

Hab. Brazil (Para).

215. MUTILLA PARALLELA. B.M.

Mutilla parallela, *Klug, Nova Acta Cæs. Curios.* x. 313. 16 ♀. t. 23. f. 1.

Hab. Brazil (Para).

216. MUTILLA PRUINOSA. B.M.

Male. Length 6 lines.—Black, head narrower than the tho-

rax, eyes ovate; the face and cheeks thinly covered with griscous pubescence. Thorax: the scutellum produced, armed on each side with a stout tooth; the metathorax clothed with silvery pubescence; the wings hyaline, having a dark fuscous marginal cloud, also a dark stain at the apex of the externo-medial cell. Abdomen petiolate, the three basal segments thinly covered with silvery pubescence; the apical segments clothed with black pubescence.

Hab. Brazil (Para). (H. W. Bates.)

217. MUTILLA QUADRIPUSTULATA. B.M.

Mutilla quadripustulata, *Klug, Nova Acta Cæs. Curios.* x. 316. 17 ♀. t. 23. f. 2.

Hab. Brazil (Para).

218. MUTILLA SUCCINCTA. B.M.

Female. Length 4–4½ lines.—Black, head as wide as the thorax, finely shagreened. Thorax oblong-quadrate, ferruginous above, longitudinally rugose, the metathorax rounded and crenulated at the sides, covered with large shallow punctures; the legs have a thin scattered pale glittering pubescence. Abdomen: the second segment having two round patches of golden pubescence placed towards the apical margin, the four apical segments covered with pale golden pubescence; the margins of the segments beneath ciliated with pale glittering hairs.

Hab. Brazil (Para).

219. MUTILLA TRISTIS. B.M.

Mutilla tristis, *Klug, Nova Acta Cæs. Curios.* x. 318. 20 ♀. t. 23. f. 5.

Hab. Brazil (Para).

220. MUTILLA VAGA.

Female. Length 5 lines.—Black, head finely shagreened, the thorax longitudinally rugose, the sides slightly narrowed posteriorly, the metathorax rounded; the legs have a thinly scattered pale glittering pubescence, the calcaria white. Abdomen: the second segment having two elongate-ovate yellow maculæ which are covered with golden pubescence, the four apical segments fringed with silvery pubescence.

Hab. Brazil (Para). (H. W. Bates.) (Coll. W. W. Saunders, Esq.)

221. MUTILLA VIDUA. B.M.

Mutilla vidua, *Klug, Nova Acta Cæs. Curios.* x. 313. 14 ♀. t. 22. f. 11.
St. Farg. Hym. iii. 636. 61.

Hab. Brazil (Para).

222. MUTILLA ATRIPES. B.M.

Female. Length 6–8 lines.—Black, the head and thorax rugose, the latter armed on each side with three obtuse tubercles; the pubescence on the legs deep black. Abdomen: the second segment having four ovate reddish-yellow maculæ, the basal pair smallest; a narrow line of bright silvery pubescence runs down the centre of the three apical segments; beneath, the margins of the segments thinly fringed with silvery hairs.

Hab. Brazil (Santarem).

This species closely resembles *M. quadrinotata*; the spots on the abdomen are however smaller, the thorax and legs are entirely black, and the abdomen has only a very narrow line of silvery pubescence; it is apparently a distinct species.

223. MUTILLA CHRYSOCEPHALA. B.M.

Female. Length 3–4¼ lines.—Purple, closely punctured; the face and vertex of the head densely clothed with short golden pubescence; the antennæ, mandibles and legs red; the thorax oblong-ovate, having a central longitudinal stripe of short silvery pubescence, usually more or less obliterated; the sides have also more or less of a bright silvery pile. Abdomen: the apical margin of the basal segment silvery; two elongate spots at the base of the econd segment, two quadrate spots on its apical margin, and a eries of similar spots on the four apical segments, of bright silvery pubescence, the abdomen beneath silvery.

Hab. Brazil (Santarem). (H. W. Bates.)

224. MUTILLA OCULIFERA. B.M.

Male. Length 4 lines.—Head and thorax black, coarsely punctured and clothed with long glittering hoary pubescence; eyes ovate, head narrower than the thorax, the metathorax rounded; wings subhyaline, slightly fuscous towards their apical margins; legs covered with long loose hoary pubescence. Abdomen petiolate, the petiole black, the apical margin of the basal segment and rest of the abdomen ferruginous, the three apical

segments fusco-ferruginous; a dark stain at the extreme lateral margins of the second segment.

Hab. Brazil (Santarem). (H. W. Bates.)

This species closely resembles the *M. rufiventris* of Klug, but in that species the eyes are emarginate.

225. MUTILLA LÆTA. B.M.

Female. Length 2¼ lines.—Head black, wider than the thorax; the mandibles, scape, and three basal joints of the flagellum, also the underside of the three or four following joints, reddish-yellow; tips of the mandibles black; the head is rounded behind. Thorax elongate-ovate, of a reddish-yellow, the legs of the same colour; a horse-shoe-shaped black mark on the mesothorax posteriorly. Abdomen reddish-yellow, the first joint small, subpetiolate, and having a black spot above; the second segment has a broad black band above, its posterior margin as well as the entire abdomen beneath has a short sericeous pile; the apical segments above have a golden pile.

Hab. Brazil (Santarem). (H. W. Bates.)

226. MUTILLA FESTIVA. B.M.

Female. Length 3½ lines.—Black, the head clothed with short pale golden pubescence, the antennæ and mandibles rufo-piceous, the latter black at their tips. Thorax short, rounded anteriorly, narrowed posteriorly, compressed at the sides which have a stripe of pale golden pubescence, the metathorax coarsely rugose; the legs dark rufo-piceous, and having a thin long pale glittering pubescence, the tarsi rufo-testaceous. Abdomen: a round spot of pale golden pubescence at the apex of the basal segment, in the middle; another elongate spot extends from the middle of the second to the apex of the third segment; the extreme lateral margins of all the segments fringed with pale golden pubescence; the segments beneath fringed with hairs of a similar colour.

Hab. Brazil (Santarem).

227. MUTILLA GRATIOSA. B.M.

Female. Length 4½ lines.—Black, clothed with black pubescence; the head has an elongate patch of silvery pubescence, which extends from the insertion of the antennæ to the posterior margin of the vertex, towards which it is narrowed to a point. Thorax elongate-ovate; the sides of the metathorax have an elongate silvery stripe. Abdomen: the sides of the basal segment silvery; a round silvery spot on each side of the second segment towards its basal margin, in a line with which is a larger quadrate

spot at its apical margin, from which a stripe of silvery pubescence runs to the apex of the abdomen; the extreme lateral margins have a patch of silvery pubescence, and the margins of the segments beneath are ciliated with silvery hairs, the second segment being ruggedly punctured.

Hab. Brazil (Santarem). (H. W. Bates.)

228. MUTILLA SIMPLEX. B.M.

Male. Length 2¾ lines.—Head and thorax black, the eyes emarginate; the head and scape of the antennæ thickly clothed with short ochraceous pubescence. Thorax clothed with a similar pubescence to that on the head, most sparing on the mesothorax and scutellum, which are roughly punctured, the latter produced and rounded behind; tegulæ very large, their outer margins pale testaceous; the metathorax densely clothed with silvery pubescence; wings fusco-hyaline, their apical margins clouded. Abdomen ferruginous, strongly punctured, the apical margin of the second segment and the basal segment entirely covered with silvery pubescence; the three apical segments have a longitudinal central carina, and the two apical ones are fuscous.

Hab. Brazil (Santarem). (H. W. Bates.)

229. MUTILLA STYGIA. B.M.

Female. Length 7 lines.—Black, the head narrower than the thorax, both roughly sculptured. Thorax: the anterior angles acute, armed on each side, about the middle, with a large angular tooth, behind which it is suddenly narrowed and rounded posteriorly; the pubescence long, black and thinly scattered, that on the legs black; the basal segment of the abdomen has two spots of silvery pubescence on its apical margin; the second segment has on each side a large red macula, and the four apical segments on each side have a spot of pale golden pubescence, forming a subinterrupted line.

Hab. Brazil (Santarem). (H. W. Bates.)

Closely allied to *M. perspicularis*, but differing in having the head and thorax entirely black, and the spots on the abdomen smaller.

230. MUTILLA VALIDA. B.M.

Female. Length 4½–5 lines.—Black, head large, quadrate, posterior angles acute; sometimes a little golden pubescence on each side of the vertex; the head and thorax rugose, the former wider than the latter. Thorax short, broad, and slightly nar-

rowed posteriorly, thinly sprinkled over, as well as the head, with long black hairs; the legs have a scattered pale glittering pubescence, the intermediate and posterior tibiæ armed exteriorly with a row of ferruginous spines. Abdomen longitudinally rugose, the second segment having two large ovate punctured yellow spots, the margins of the segments fringed with a loose pale golden pubescence; beneath, the margins of the segments ciliated with pale glittering hairs.

Hab. Brazil (Tapajos). (H. W. Bates.)

231. MUTILLA DENTICULATA. B.M.

Female. Length 3 lines.—Pale rufo-testaceous, irregularly mottled with darker stains, very closely covered with large punctures; the head wider than the thorax, the eyes very large and prominent. Thorax subquadrate, the anterior angles acute, the lateral margins denticulated, as well as those of the metathorax. Abdomen: the second segment having on each side a large denticulated tubercle; parallel with these at the extreme lateral margins is a black stain, in the middle of which is an elevated carina.

Hab. Brazil (Rio Tapajos; Para). (H. W. Bates.)

This species is closely allied to the *M. tuberculata* of Fabricius, but differs in having the abdomen pale, and the tubercles denticulated.

232. MUTILLA FISSICEPS. B.M.

Female. Length 3–3½ lines.—Head black, wider than the thorax, the face above the insertion of the antennæ produced, forming a large transverse elevation, which is deeply notched in the middle; the basal portion of the scape and the mandibles in the middle ferruginous. Thorax short, subquadrate, ferruginous, the lateral margins crenulated, the metathorax rounded at the sides, usually more or less fuscous; legs dark rufo-testaceous, the apical joints of the tarsi ferruginous, the intermediate and posterior tibiæ furnished exteriorly with a row of spines. Abdomen black, the extreme base ferruginous; the second segment has two large oblong ferruginous maculæ, the four apical segments fringed with silvery pubescence.

Hab. Brazil (Rio Tapajos).

233. MUTILLA POLITA. B.M.

Male. Length 3 lines.—Black, the eyes ovate; head, prothorax and metathorax clothed with silvery pubescence; the legs

have a scattered silvery pubescence, the calcaria white; the first recurrent nervure entering the second submarginal cell near its base. Abdomen petiolate, the first segment, base of the second, the third, fourth and fifth, clothed with silvery-white pubescence, the apical segments black; the entire insect sprinkled with long pale glittering hairs.

Hab. Brazil (Amazons).

234. MUTILLA SABULOSA.

Female. Length 5½ lines.—Black, head and thorax closely and roughly punctured, the former quadrate, the posterior angles rounded. Thorax short, subquadrate, narrowed posteriorly, the mesothorax having on each side at its hinder angles a spot of silvery pubescence; the legs have a scattered silvery pubescence, most dense on the basal joint of the tarsi. Abdomen: the basal margin of the first segment denticulated; the second segment having on each side a large ovate red macula, which is glassy-smooth; the four apical segments clothed with silvery pubescence, having a denuded line down the centre; the entire insect thinly sprinkled with black hairs.

Hab. Brazil (Rio; Amazons). (Coll. W. W. Saunders, Esq.; H. W. Bates.)

235. MUTILLA FIDICULA. B.M.

Female. Length 3–3½ lines.—Pale rufo-testaceous, head and thorax roughened with confluent punctures, the thorax being longitudinally rugose; eyes large, black and very prominent; the flagellum fuscous above, except two or three of the basal joints, which are pale; tips of the mandibles black; the vertex transverse, its posterior angles acute. Thorax fiddle-shaped, the entire lateral margins denticulate; tips of the femora and tibiæ fuscous. Abdomen longitudinally rugose, more delicately so than the thorax; the second segment having at its basal margin laterally a round black or fuscous stain; the apical margin has a broad black fascia, emitting in the centre a black stripe which scarcely reaches the basal margin; the apical segment fuscous at the tip; the entire insect thinly sprinkled with long pale hairs.

Hab. Brazil (Ega on the Amazons). (H. W. Bates.)

236. MUTILLA ARGYRA.

Mutilla argyra, *Spin. Ann. Soc. Ent. Fr.* x. 85. 51 ♂.

Hab. Cayenne.

237. MUTILLA ARGENTEA. B.M.

Mutilla argentea, *St. Farg. Hym.* iii. 636. 62 ♂.

Hab. Cayenne; Brazil.

238. MUTILLA BITÆNIATA.

Mutilla bitæniata, *Spin. Ann. Soc. Ent. Fr.* x. 91. 54 ♀.

Hab. Cayenne.

239. MUTILLA MELANA.

Mutilla melana, *Spin. Ann. Soc. Ent. Fr.* x. 87. 52 ♂.

Hab. Cayenne.

240. MUTILLA PARVULA.

Mutilla parvula, *Fabr. Syst. Piez.* p. 436. 36.
Oliv. Ency. Méth. viii. 65. 58.

Hab. South America.

241. MUTILLA PELETERII.

Mutilla Peleterii, *St. Farg. Hym.* iii. 635. 60 ♀.

Hab. Cayenne.

242. MUTILLA RECTANGULUM.

Mutilla rectangulum, *Spin. Ann. Soc. Ent. Fr.* x. 91. 55 ♂.

Hab. Cayenne.

243. MUTILLA SINGULARIS. B.M.

Mutilla singularis, *Spin. Ann. Soc. Ent. Fr.* x. 95. 57. t. 3. f. 1.
St. Farg. Hym. iii. 645. 79.

Hab. Cayenne; Para.

244. MUTILLA SPINOSA. B.M.

Mutilla spinosa, *Swed. Nov. Act. Holm.* viii. 283. 39 ♀.
Linn. Syst. Nat. Gmel. Ed. v. 2808. 23.
Klug, Nova Acta Cæs. Nat. Curios. x. 309. 7. t. 22. f. 4.
St. Farg. Hym. iii. 621. 40.
Mutilla derasa, *Fabr. Syst. Piez.* p. 429. 2.
Oliv. Ency. Méth. viii. 55. 4.
St. Farg. Hym. iii. 644. 76.

Mutilla perspicularis, *Klug, Nova Acta Cæs. Nat. Curios.* x. 309. 8. t. 22. f. 8 ♀ (var.).
St. Farg. Hym. iii. 643. 75.
Mutilla lanata, *St. Farg. Hym.* iii. 644. 77 ♀ (var.).

Hab. Brazil; Rio Janeiro; British Guiana; Cayenne; Venezuela.

245. MUTILLA ZONATA.

Mutilla zonata, *Spin. Ann. Soc. Ent. Fr.* x. 89. 53 ♂.

Hab. Cayenne.

246. MUTILLA SPHEGEA.

Mutilla sphegea, *Fabr. Syst. Piez.* p. 435. 31 ♀.
Mutilla fasciata, *Oliv. Ency. Méth.* viii. 55. 3.
Spin. Gay's Chili, vi. 278. 7.

Hab. South America.

247. MUTILLA TUBERCULATA.

Mutilla tuberculata, *Fabr. Syst. Piez.* p. 438. 43 ♀.
Oliv. Ency. Méth. viii. 65. 63.

Hab. South America.

248. MUTILLA SENEX.

Mutilla senex, *Guér. Icon. Règ. Anim.* iii. 429. t. 69. f. 4.

Hab. Cuba.

249. MUTILLA ARGENTATA.

Mutilla argentata, *Klug, Nova Acta Cæs. Nat. Curios.* x. 305. 2 ♂. t. 21. f. 11 ♂.

Hab. Brazil (Bahia).

250. MUTILLA CERBERA. B.M.

Mutilla cerbera, *Klug, Nova Acta Cæs. Nat. Curios.* x. 312. 12. t. 22. f. 9 ♀.

Hab. Brazil (Bahia).

251. MUTILLA CEPHALOTES. B.M.

Mutilla cephalotes, *Swed. Nova Acta Holm.* viii. 40. 273.
Gmelin, Ed. Linn. Syst. Nat. i. 5. 2808. 24.
Klug, Nova Acta Cæs. Nat. Curios. x. 322. 26.
St. Farg. Hym. iii. 611. 26.

Hab. Brazil (Bahia).

252. MUTILLA DIOPHTHALMA.

Mutilla diophthalma, *Klug, Nova Acta Cæs. Nat. Curios.* x. 318. 21 ♀. t. 23. f. 6.

Hab. Brazil (Bahia).

253. MUTILLA INERMIS. B.M.

Mutilla inermis, *Klug, Nova Acta Cæs. Nat. Curios.* x. 317. 19 ♀. t. 23. f. 4.
St. Farg. Hym. iii. 642. 74.

Hab. Brazil (Bahia).

254. MUTILLA QUADRUM. B.M.

Mutilla quadrum, *Klug, Nova Acta Cæs. Nat. Curios.* x. 320. 23 ♀. t. 23. f. 8.

Hab. Brazil (Bahia).

255. MUTILLA RUFIVENTRIS. B.M.

Mutilla rufiventris, *Klug, Nova Acta Cæs. Nat. Curios.* x. 306. 3 ♂. t. 21. f. 12.

Hab. Brazil (Bahia).

256. MUTILLA PHALERATA.

Mutilla phalerata, *Klug, Nova Acta Cæs. Nat. Curios.* x. 308. 6 ♀. t. 22. f. 3.

Hab. Brazil (Cameta).

257. MUTILLA OCELLARIS. B.M.

Mutilla ocellaris, *Klug, Nova Acta Cæs. Nat. Curios.* x. 321. 24 ♀. t. 23. f. 9.

Hab. Brazil (Cameta).

258. MUTILLA BILINEATA.

Mutilla bilineata, *Klug, Nova Acta Cæs. Nat. Curios.* x. 307. 5 ♀. t. 22. f. 2.

Hab. Brazil (Cameta). (Coll. F. Smith.)

259. MUTILLA AUROGUTTATA. B.M.

Female. Length 3 lines.—Black, the head as wide as the thorax, roughly punctured. Thorax ferruginous and oblong,

quadrate, longitudinally rugose, the legs thinly sprinkled with pale glittering pubescence, the apical joints of the tarsi rufo-testaceous. The second segment of the abdomen has on each side a large ovate macula of golden pile, the third and fourth segments having a broad band of golden pile, the entire insect thinly sprinkled over with long pale glittering hairs.

Hab. Brazil.

260. MUTILLA BIFURCA.

Mutilla bifurca, *Klug, Nova Acta Cæs. Nat. Curios.* x. 313. 13 ♀. t. 22. f. 10.

Hab. Brazil (Cameta and Bahia).

261. MUTILLA BUCEPHALA.

Mutilla bucephala, *Perty, Del. An. Art.* p. 137. t. 28. f. 8.

Hab. Brazil.

262. MUTILLA BUCEPHALUS.

Female. Length 5½ lines.—Black, head and thorax strongly punctured; the former much wider than the latter, the cheeks not spined. Thorax narrowed posteriorly, unarmed at the sides, and having two ovate spots of silvery pubescence on the disk; the sides of the metathorax covered with short silvery pubescence. Abdomen: the basal segment having an acute ridge a little before the apical margin, the ridge denticulate; the second segment having two large round naked maculæ of a pale testaceous colour.

Hab. Brazil. (Coll. F. Smith.)

263. MUTILLA CHRYSODORA.

Mutilla chrysodora, *Perty, Del. An. Art.* p. 137. t. 27. f. 7.

Hab. Brazil.

264. MUTILLA DECORATA.

Mutilla ornata, *St. Farg. Hym.* iii. 622. 41 ♀ (nec *Klug*).

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

265. MUTILLA FURVA.

Female. Length 3 lines.—Head black, antennæ and mandibles rufo-testaceous, the flagellum above slightly fuscous, the mandibles black at their tips; thorax and legs rufo-testaceous, the latter palest; the thorax is fiddle-shaped, the lateral margins being denticulated. Abdomen: the basal segment, the basal mar-

gin of the second segment narrowly, and a broad slightly interrupted band near its apical margin, pale rufo-testaceous; its apical margin narrowly testaceous; the four apical segments rufo-testaceous, their apical margins palest.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

266. MUTILLA GIGANTEA.

Mutilla gigantea, *Perty, Del. An. Art.* p. 138. t. 27. f. 9.

Hab. Brazil.

267. MUTILLA HERALDICA.

Female. Length 5¼ lines.—Black, the head densely clothed with cream-coloured pubescence, a stripe of black behind the eyes; the basal joints of the antennæ have a white pubescence. The thorax and legs densely clothed with similar pubescence to the head, a triangular patch of black pubescence on the mesothorax anteriorly, also a black line down the metathorax. Abdomen black, the second segment having two large elongate spots uniting to a second lateral spot, which again unites with the colouring of the entire segment beneath, all being of a cream-coloured white; the third segment in the middle has a quadrate patch, and the fourth and fifth have a transverse one, all occupying the width of the segment.

Hab. South America (Brazil?).

268. MUTILLA INAURATA. B.M.

Male. Length 4½-6½ lines.—Black, the face below the antennæ covered with pale golden pubescence, the tips of the mandibles ferruginous. Thorax clothed with black, and the metathorax with silvery pubescence; the scutellum produced, and a prominent tubercle in the centre of the metathorax; the tegulæ very large, rounded behind; the wings subhyaline, slightly clouded at their apical margins; the legs have a thin clothing of pale glittering pubescence. Abdomen petiolate, the petiole clothed with silvery pubescence, the second and three following segments covered with rich golden pubescence, the second segment more or less black at the base; a central carina runs from the base of the fourth segment to the apex of the abdomen.

Hab. Brazil.

269. MUTILLA MELANOCEPHALA.

Mutilla melanocephala, *Perty, Del. An. Art.* p. 137. t. 27. f. 6.

Hab. Brazil.

270. MUTILLA SQUAMATA.

Male. Length 3½ lines.—Head, thorax and legs black; the head, except an ovate naked space enclosing the ocelli, the prothorax, metathorax above, sides and breast covered with a dense silvery pile; scales of the wings large, pointed behind, their outer margins pale testaceous, wings fusco-hyaline, metathorax truncate. Abdomen ferruginous, closely punctured, the basal segment quadrate, its apical margin as well as that of the second segment having a fascia of silvery pile; the entire abdomen sprinkled over very sparingly with long silvery hairs.

Hab. Brazil. (Coll. F. Smith.)

271. MUTILLA AURULENTA.

Mutilla aurulenta, *Fabr. Syst. Piez.* p. 436. 38.
Oliv. Ency. Méth. viii. 63. 51.

Hab. South America.

272. MUTILLA DUBIA.

Mutilla dubia, *Fabr. Syst. Piez.* p. 435. 33.
Oliv. Ency. Méth. viii. 63. 49.

Hab. South America.

273. MUTILLA DORSATA.

Mutilla dorsata, *Fabr. Ent. Syst. Supp.* p. 281. 13–14 ♀; *Syst. Piez.* p. 432. 18.
Oliv. Ency. Méth. viii. 60. 31.

Hab. South America.

274. MUTILLA KLUGII.

Mutilla Klugii, *Gray, Cuv. Anim. King.* (*Griff.*) xv. 516 ♀. t. 71. f. 2 ♀.
St. Farg. Hym. iii. 596. 2?

Hab. South America.

275. MUTILLA ANDRENIFORMIS. B.M.

Male. Length 4 lines.—Black, densely pubescent, that on the vertex and mesothorax bright ochraceous, on the legs and rest of the body it is cinereous, tinged with yellow on the abdomen above; the wings smoky-hyaline, having a broad darker band on their apical margins; the abdomen petiolated, the petiole having a broad longitudinal groove above, not quite reaching

the apex, and on each side an obtuse tooth near its base; the abdomen is strongly punctured and shining.

Hab. Vera Cruz.

276. MUTILLA CRUX.

Female. Length 4 lines.—Black, head a little wider than the thorax, rounded behind; the face and vertex adorned with golden pubescence; the scape, two basal joints of the flagellum and the mandibles pale ferruginous, the latter black at their tips. Thorax elongate, narrow and unarmed at the sides, having a central longitudinal stripe of golden pubescence; the legs ferruginous. Abdomen clothed with very short black pubescence; a central longitudinal line of golden pubescence extends from the base to the apex, crossed by a similar line towards the apex of the second segment.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

277. MUTILLA INSIGNIS. B.M.

Female. Length 8–9 lines.—Black, clothed with short black pubescence; head as wide as the thorax, quadrate, the posterior angles rounded; the face clothed with golden pubescence, having a narrow line of black down the centre not extending to the insertion of the antennæ; the antennæ pale rufo-testaceous; the mandibles dark rufo-piceous. Thorax scarcely as wide as the head anteriorly, posteriorly narrowed beyond the middle; at the anterior angle of the contraction, on each side, a stout sharp tooth; at the anterior angles of the metathorax laterally an obtuse tubercle; the mesothorax having a transverse broad band, angularly emarginate anteriorly, of pale golden pubescence; the metathorax has a broad stripe of the same on each side; the legs clothed with pale golden, or inclining to an ochraceous pubescence. Abdomen: the basal segment clothed with pale golden pubescence, and having a black rounded spot in the middle; the second segment has on each side a large subovate spot clothed with very short dense pale golden pubescence; the four apical segments are clothed with a similar pubescence, and have a line of black pubescence down their centre, narrowest towards the apex; the segments beneath have their margins fringed with pale glittering pubescence; the black pubescence of the entire insect sprinkled with long erect black hairs, and the yellow pubescence with erect yellow ones.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

278. MUTILLA LÆTA.

Female. Length 5 lines.—Black, head quadrate, wider than the thorax, cheeks unarmed, the posterior angles of the vertex acute; the flagellum rufo-testaceous beneath, on the vertex a round patch of silvery pubescence. Thorax short, slightly contracted posteriorly; the mesothorax has on each side a spot of silvery pubescence which is sometimes united to a spot on the sides of the metathorax. Abdomen: the second segment decorated with four ovate ferruginous spots, two touching the basal margin, and two larger ones towards the apical margin; the four apical segments clothed with silvery pubescence, having a denuded line down the centre; the abdomen, legs, and entire insect beneath sprinkled with long glittering silvery hairs.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

279. MUTILLA SIMULANS. B.M.

Female. Length 4¼ lines.—Black, the head having a large patch of silvery pubescence on the vertex. Thorax subovate, narrowed posteriorly; an elongate-ovate patch of silvery pubescence on each side of the mesothorax, placed obliquely before the scutellum; also a line of similar pubescence on each side of the metathorax, slightly separated from the ovate spots; the thorax beneath silvery, the legs having a thin scattered long silvery pubescence, the intermediate and posterior tibiæ spined externally. Abdomen: the second segment has on each side, touching the base, an ovate yellow macula, and a second pair placed transversely towards the apical margin; the fourth and fifth segments have a central patch of silvery pubescence; a similar patch is placed, on each side, at the extreme lateral apical margins of all the segments; beneath, the margins ciliated with silvery hairs.

Hab. Venezuela.

280. MUTILLA ANTIGUENSIS. B.M.

Mutilla Antiguensis, *Fabr. Ent. Syst.* ii. 367. 2; *Syst. Piez.* p. 429. 3.
Oliv. Ency. Méth. viii. 56. 6.
St. Farg. Hym. iii. 604. 13.
Mutilla erythrina, *Say, Bost. Journ.* i. 297. 4.

Hab. Island of Antigua; Mexico.

281. MUTILLA ARACHNOIDES. B.M.

Female. Length 5½ lines.—Black, densely pubescent, that on the head ochraceous. Thorax and legs covered with ochraceous pubescence, the former having a large rounded patch of black on the disk; the abdomen is also covered with ochraceous

pubescence, the second segment having a large trilobate black pubescent patch, which extends from the basal to the apical margin of the segment; the fifth and sixth segments are covered with black pubescence, the sides being pale.

Hab. Mexico.

282. MUTILLA BIFASCIATA.

Mutilla bifasciata, *Swed. Nov. Act. Holm.* viii. 285. 41 & 42 ♂.

Hab. New York.

283. MUTILLA CANINA. B.M.

Female. Length 4½ lines.—Rufo-testaceous, palest beneath; the vertex and front densely clothed with long pale ochraceous pubescence; head round, eyes large and prominent. Thorax: the anterior half of the mesothorax clothed with black pubescence, the posterior half with pale ochraceous; the apical margins of the second, third and fourth segments have a broad fascia of pale ochraceous pubescence; that on the second produced in the middle into an angular shape; the basal half of the second segment, and the third and sixth segments entirely clothed with black pubescence; the entire insect sprinkled over with long loose pale hairs.

Hab. Mexico.

284. MUTILLA CAPITATA. B.M.

Female. Length 8 lines.—Black, head quadrate, wider than the thorax, densely clothed with pale golden pubescence, the cheeks furnished with a stout tooth; the apical joints of the flagellum ferruginous beneath; the mandibles ferruginous, their apex black. Thorax short, broad and narrowed posteriorly, rounded in front; suddenly contracted, on each side a short tooth before the contraction; the metathorax truncate; the disk covered with pale golden pubescence, having in front a large rounded black patch; the legs thinly covered with pale golden pubescence, the calcaria and apical joints of the tarsi pale ferruginous; the intermediate and posterior tibiæ armed exteriorly with a row of spines. Abdomen: the second segment having a large transverse yellow macula clothed with golden pubescence, the macula deeply emarginate anteriorly and posteriorly, narrowest towards the base of the segment, and slightly emarginate at the sides, the posterior angles rounded; the third and following segments covered with very pale golden pubescence, the fourth having a central patch of black pubescence; beneath, the margins of the segments ciliated with silvery pubescence.

Hab. Mexico (Puebla).

285. MUTILLA COMBUSTA.

Female. Length 4½ lines.—Entirely of a reddish-brown, the antennæ, mandibles and legs ferruginous, the head and the thorax above clothed with golden pubescence; the sides of the thorax unarmed, narrowed posteriorly; the basal and four apical segments of the abdomen adorned with golden pubescence; the second segment having two large ovate testaceous maculæ, placed transversely a little beyond the middle.

Hab. Mexico. (Coll. W. W. Saunders, Esq.)

286. MUTILLA CHILENSIS.

Mutilla Chilensis, *Spin. Gay's Chili*, vi. 270. 1 ♀. t. 3. f. 1 & 1 *a*.

Hab. Chili.

287. MUTILLA LUNULATA.

Mutilla lunulata, *Spin. Gay's Chili*, vi. 273. 2 ♀.

Hab. Chili.

288. MUTILLA LÆVIOR.

Mutilla lævior, *Spin. Gay's Chili*, vi. 274. 3 ♀.

Hab. Chili.

289. MUTILLA TETRAGONODERA.

Mutilla tetragonodera, *Spin. Gay's Chili*, vi. 275. 4 ♀.

Hab. Chili.

290. MUTILLA GAYI.

Mutilla Gayi, *Spin. Gay's Chili*, vi. 276. 5. t. 3. f. 2 ♀. 2 *b* ♂.

Hab. Chili.

291. MUTILLA ATRIPENNIS.

Mutilla atripennis, *Spin. Gay's Chili*, vi. 277. 6 ♂.

Hab. Chili.

292. MUTILLA ATTENUATA.

Mutilla attenuata, *Spin. Gay's Chili*, vi. 278. 8. t. 3. f. 3 ♂.

Hab. Chili.

293. MUTILLA TENUIVENTRIS.

Mutilla tenuiventris, *Spin. Gay's Chili*, vi. 280. 9. t. 3. f. 4 ♂.

Hab. Chili.

294. MUTILLA CONTRACTA.

Mutilla contracta, *Say, Bost. Journ.* i. 295. 1 ♂.

Hab. North America (Indiana and Missouri).

295. MUTILLA DUBITATA. B.M.

Female. Length 4 lines.—Ferruginous, the eyes, flagellum, and tips of the mandibles fusco-testaceous. Thorax, as well as the head, closely and strongly punctured; the sides of the former parallel, or in some specimens slightly widest posteriorly, tips of the femora and tibiæ slightly fuscous. Abdomen ovate, the apical margins of the segments have fasciæ of silvery-white pubescence; beneath ciliated with similar pubescence.

Hab. St. John's Bluff (East Florida).

This species in colouring corresponds with the *M. ferrugata* of Fabricius, but the thorax is of quite a different form to that of the insect which is considered to represent that species; in the present species the thorax is more elongate and the sides nearly parallel; in the other it is shorter, and gradually narrows towards the abdomen.

296. MUTILLA EXULANS.

Mutilla exulans, *Fabr. Ent. Syst.* ii. 368. 8; *Syst. Piez.* p. 430. 8.
Oliv. Ency. Méth. 56. 10.

Hab. North America.

297. MUTILLA FERRUGATA. B.M.

Mutilla ferrugata, *Fabr. Syst. Piez.* p. 438. 47 ♀.
Oliv. Ency. Méth. viii. 61. 34.
St. Farg. Hym. iii. 608. 21.
Mutilla fenestrata, *St. Farg. Hym.* iii. 627. 48 ♂.

Hab. Carolina; St. John's Bluff, East Florida. (E. Doubleday.)

298. MUTILLA FRIGIDA. B.M.

Female. Length 2 lines.—Ferruginous, closely punctured, head subquadrate, wider than the thorax; the flagellum, except the three basal segments, the eyes, and tips of the mandibles fuscous. Thorax oblong-quadrate, very slightly narrowed posteriorly, the tibiæ and femora fuscous; their base, the tarsi and coxæ pale ferruginous. Abdomen: the four apical segments and the apical margins of the two basal ones rufo-piceous, the marginal band on the second segment produced into an angular

shape in the middle; the margins of the four apical segments ciliated with cinereous hairs.

Hab. Arctic America (The Great Bear Lake). (Sir John Richardson.)

299. MUTILLA GIBBOSA.

Mutilla gibbosa, *Say, Bost. Journ.* i. 298. 6 ♂.

Hab. North America (Indiana).

300. MUTILLA HEXAGONA.

Mutilla hexagona, *Say, Bost. Journ.* i. 295. 2 ♂.

Hab. North America (Indiana and Missouri).

301. MUTILLA MILITARIS. B.M.

Female. Length 6 lines.—Bright brick-red; the head, legs, basal segment of the abdomen, a trilobate spot at the base of the second segment, an angular one on its apical margin, and also the four apical segments, black; all the black parts of the insect, except the legs, are clothed with black pubescence, on the legs and the red portions it is griseous.

Hab. Jamaica. (H. W. Gosse.)

302. MUTILLA MONTEZUMÆ.

Mutilla Montezumæ, *St. Farg. Hym.* iii. 634. 59 ♀.

Hab. Mexico.

303. MUTILLA OCCIDENTALIS. B.M.

Mutilla occidentalis, *Linn. Syst. Nat.* i. 966. 1 ♀.
St. Farg. Hym. iii. 595. 1. t. 36. f. 8 ♂.
Mutilla coccinea, *Fabr. Ent. Syst.* ii. 966. 1; *Syst. Piez.* p. 428. 1.
Sulz. Ins. t. 19. f. *g.*
Oliv. Ency. Méth. viii. 55. 1.
St. Farg. Hym. iii. 595. 1.
Palis. de Beauv. Ins. Afric. et Amér. p. 257. t. 10. f. 1 ♂. 2 ♀.

Hab. North America.

304. MUTILLA PENNSYLVANICA.

Mutilla Pensylvanica, *St. Farg. Hym.* iii, 628. 49 ♂.

Hab. Philadelphia.

305. MUTILLA PULCHRA.

Female. Length 9 lines.—Black, head small, narrower than the thorax, and densely clothed with bright golden pubescence. Thorax deeply notched at the sides, and having a transverse curved fascia of golden pubescence a little beyond the middle; the thorax beneath and the legs have a pale ochraceous glittering pubescence. Abdomen: the second segment has on each side at its base a large angular macula, and towards its apical margin on each side a transverse oblong subovate macula of a reddish-yellow; the three apical segments clothed with golden pubescence, the fifth having on each side a mixture of black or fuscous hairs.

Hab. Mexico. (Coll. W. W. Saunders, Esq.)

306. MUTILLA RUFA. B.M.

Mutilla rufa, *St. Farg. Hym.* iii. 631. 54 ♂.

Hab. Philadelphia.

307. MUTILLA SCRUPEA.

Mutilla scrupea, *Say, Bost. Journ.* i. 297. 5 ♂.

Hab. North America (Indiana).

308. MUTILLA SIMILLIMA. B.M.

Female. Length 5 lines.—Ferruginous, closely covered with strong elongate punctures, those on the abdomen running into striæ; the eyes, tips of the mandibles and the flagellum black; the legs fuscous; the thorax rounded in front, narrowed posteriorly, the sides crenulated, the lateral margins of the metathorax crenulated. Abdomen: the apical margins of the segments fuscous, those of the first and second fringed with black pubescence, the four apical margins fringed with cinereous pubescence.

Hab. Massachusetts.

This species is very like the *Mutilla ferrugata* of Fabricius, but is easily distinguished by its coarse sculpture, and by having the base of the abdomen broad, whereas in *M. ferrugata* it is much narrowed at the base.

309. MUTILLA VAGANS.

Mutilla vagans, *Fabr. Ent. Syst. Supp*, p. 282. 27 ♀; *Syst. Piez.* p. 439. 50.
Oliv. Ency. Méth. viii. 66. 69.

Hab. North America.

310. MUTILLA VESTITA. B.M.

Mutilla vestita, *St. Farg. Hym.* iii. 634. 58 ♂.

Hab. Mexico.

311. MUTILLA VERTICALIS. B.M.

Female. Length 5½ lines.—Black, the head broader than the thorax; the vertex red, and clothed with ferruginous pubescence. Thorax narrowed posteriorly, the sides slightly contracted a little beyond the middle, the lateral margins crenulated; the mesothorax has a broad red stripe on each side; the legs and the thorax beneath thinly covered with pale glittering pubescence; the intermediate and posterior tibiæ armed exteriorly with a row of sharp spines. Abdomen: the second segment has two small ovate spots at its basal margin, and beyond them two large ovate ones almost touching in the centre of the segment; the four apical segments fringed with long pale yellow glittering pubescence.

Hab. Mexico.

312. MUTILLA VERSICOLOR. B.M.

Mutilla versicolor, *Fabr. Ent. Syst.* ii. 371. 20; *Syst. Piez.* p. 434. 30.
Oliv. Ency. Méth. viii. 63. 46.

Hab. America; St. John's Bluff, East Florida. (E. Doubleday.)

313. MUTILLA VIGILANS.

Mutilla vigilans, *Say, Bost. Journ.* i. 296. 3.

Hab. Pennsylvania.

Genus 2. APTEROGYNA.

Scolia, pt., *Fabr. Ent. Syst.* ii. 237 (1793).
Apterogyna, *Latr. Gen. Crust. et Ins.* iv. (1809).

1. APTEROGYNA GLOBULARIA. B.M.

Scolia globularis, *Fabr. Ent. Syst.* ii. 237. 37, and *Cab. Mus. Dom. Banks.*
Dahlm. Analec. Entom. p. 100.
Apterogyna Ehrenbergii, *Westw. Griff. Anim. Kingd.* xv. 515. t. 76. f. 5 ♂, fide type in Brit. Mus.

Hab. Cape of Good Hope.

2. APTEROGYNA OLIVIERI.

Apterogyna Olivieri, *Latr. Gen. Crust. et Ins.* iv. 122.
Klug, Symb. Phys. dec. i. t. 5. f. 11, 12.
St. Farg. Hym. iii. 593. 1 ♀.

Hab. Egypt.

3. APTEROGYNA SAVIGNYI. B.M.

Apterogyna Savignyi, *Klug, Symb. Phys.* dec. i. no. 3. t. 5. f. 14, 15.
St. Farg. Hym. iii. 594. 3.

Hab. Egypt. (Coll. Sir J. G. Wilkinson.)

4. APTEROGYNA LATREILLEI. B.M.

Apterogyna Latreillei, *Klug, Symb. Phys.* dec. i. t. 5. f. 13 ♂.
St. Farg. Hym. iii. 593. 2.

Hab. Egypt. (Coll. Sir J. G. Wilkinson.)

5. APTEROGYNA MUTILLOIDES. B.M.

Female. Length 6 lines.—Head, antennæ, thorax and first node of the abdomen ferruginous, the rest of the abdomen black, the legs dark rufo-piceous, with the articulations and the apical joints of the tarsi palest; the head anteriorly fuscous, deeply rugose-punctate; the thorax longitudinally coarsely rugose, the head and thorax thinly, and the legs thickly covered with long glittering silvery hairs. Abdomen: the first node coarsely rugose, the second and rest of the abdomen longitudinally deeply and coarsely rugose-striate; beneath, the three apical segments smooth and shining, the anterior segments with large scattered punctures.

Male. Length 5 lines.—Head, thorax and first node of the abdomen rufo-testaceous; antennæ pale rufo-testaceous, the legs of the same colour, but having the femora more or less in the middle and the tibiæ at their apex rufo-piceous, or fuscous, the wings clear hyaline and iridescent; the entire insect covered with large punctures, most dense on the nodes of the abdomen; covered with glittering pubescence as in the other sex, but more densely so towards the apex of the abdomen.

Hab. India.

Genus 3. BRADYNOBÆNUS.

Bradynobænus, *Spin. Gay's Chili*, vi. 281.

Females apterous; mandibles elongate, arcuate. Palpi filiform; the maxillary palpi three-jointed; the labial palpi two-jointed, very short. Thorax divided in two parts.

1. BRADYNOBÆNUS GAYI.

Bradynobænus Gayi, *Spin. Gay's Chili*, vi. 286. 1 ♀.

Hab. Chili.

Genus 4. MYRMOSA.

Mutilla, pt., *Fabr. Ent. Syst.* ii. 366 (1793).
Myrmosa, *Latr. Hist. Nat.* xiii. (1805).

1. MYRMOSA MELANOCEPHALA.

Mutilla melanocephala, *Fabr. Ent. Syst.* ii. 372. 27 ♀.
Oliv. Ency. Méth. viii. 65.
Coqueb. Illus. i. t. 6. f. 11.
Myrmosa melanocephala, *Latr. Hist. Nat.* xiii. 266; *Gen. Crust. et Ins.* iv. 119. t. 13. f. 6 ♀. 8 ♂.
Shuck. Foss. Hym. p. 33. 1 ♂ ♀.
Guér. Icon. Règ. Anim. Ins. p. 429. t. 69. f. 6.
Nyland. Ap. Boreal. p. 16. 2.
Wesm. Hym. Fouis. Belg. p. 21.
Myrmosa atra, *Panz. Faun. Germ.* 85. 14 ♂.
St. Farg. Hym. iii. 590. 2.
Lucas, Explo. Sc. Algér. iii. 287.
Myrmosa nigra, *Latr. Gen. Crust. et Ins.* iv. 120.
St. Farg. Hym. iii. 591. 4.
Myrmosa brunnipes, *St. Farg. Hym.* iii. 590. 3, var.

Hab. France; Germany; Britain.

2. MYRMOSA THORACICA.

Myrmosa thoracica, *Lucas, Explo. Sc. Algér.* iii. 287.

Hab. Algeria.

3. MYRMOSA SPINOLÆ.

Myrmosa Spinolæ, *St. Farg. Hym.* iii. 591. 5.

Hab. —— ?

4. MYRMOSA UNICOLOR.

Myrmosa unicolor, *Say, Nar. Exped. St. Peter's River, App.* p. 66.
Hab. Pennsylvania; Missouri.

Genus 5. METHOCA.

Methoca, *Latr. Hist. Nat.* xiii. 268 (1805).
Mutilla, *Jurine, Hym.* p. 266 (1807).
Tengyra, *Latr. Gen. Crust et Ins.* iv. 116 ♂ (1809).

1. METHOCA ICHNEUMONOIDES.

Methoca ichneumonoides, *Latr. Hist. Nat.* xiii. 269 ♀.
Guér. Icon. Règ. Anim. Ins. p. 429. t. 69. f. 7 & 8.
Curt. Brit. Ent. vii. t. 329 ♂ ♀.
Shuck. Foss. Hym. p. 36. 1.
St. Farg. Hym. iii. 573. 1. t. 36. f. 2 ♂.
Nyland. Ap. Boreal. p. 19. 1.
Wesm. Hym. Fouis. Belg. p. 22.
Mutilla formicaria, *Jurine, Hym.* p. 266. t. 13. f. 49 ♀.
Tengyra Sanvitali, *Latr. Gen. Crust. et Ins.* iv. 116 ♂.
Van d. Lind. Obs. Hym. d'Eur. p. 283. 1.
Lucas, Explo. Sc. Algér. iii. 287.
Hab. Europe.

2. METHOCA PŒYI.

Methoca Pœyi, *Guér. Icon. Règ. Anim. Ins.* p. 430 ♂ ♀.
Hab. Cuba.

3. METHOCA ORIENTALIS.

Male. Length 7 lines.—Black, head coarsely punctured, the base of the mandibles yellow, the clypeus and mandibles covered with long cinereous pubescence; the entire insect is thinly covered with similar pubescence, which is most dense on the sides of the metathorax; the thorax strongly punctured, closely so on the metathorax, which has a central abbreviated impressed line at the base; the anterior tibiæ have a yellow stripe in front; the calcaria pale testaceous, the claws ferruginous; wings fusco-hyaline, the nervures black. Abdomen black, with a slight metallic lustre, finely and distantly punctured, the margins of the segments constricted, the extreme lateral margins rufo-piceous.
Hab. Northern India. (Coll. F. Smith.)

4. METHOCA CANADENSIS.

Male. Length 4½ lines.—Black and shining, slightly villose, the face closely punctured, the vertex sparingly so; the anterior margin of the clypeus produced into an elevated tubercle, the tips of the mandibles ferruginous. Thorax coarsely punctured, the metathorax coarsely rugose; having above a central channel which is transversely ridged; behind, truncate, the truncation obliquely rugose-striate on each side, having a slight central channel; the legs have the apical joints of the tarsi obscurely rufo-piceous, the calcaria ferruginous; wings hyaline, faintly coloured. Abdomen: the basal half of the first segment rugose, the lateral margins elevated and acute; beyond this, the entire abdomen is rather finely and distantly punctured, the base of the segments depressed, their margins constricted.

Hab. Canada. (Coll. F. Smith.)

Genus 6. SCLERODERMA.

Sclerodermus, *Latr. Gen. Crust. et Ins.* iv. 119.
Scleroderma, *Westw. Trans. Ent. Soc. Lond.* ii. 164.

1. SCLERODERMA DOMESTICA.

Scleroderma domestica (*Klug, MSS.*), *Westw. Trans. Ent. Soc. Lond.* ii. 167. 1 ♀.

Hab. Berlin; Albania.

2. SCLERODERMA THORACICA.

Scleroderma thoracica, *Westw. Trans. Ent. Soc. Lond.* ii. 167. 2 ♀.

Hab. North America.

3. SCLERODERMA ABDOMINALIS.

Scleroderma abdominalis, *Westw. Trans. Ent. Soc. Lond.* ii. 167. 3 ♀.

Hab. Marseilles.

4. SCLERODERMA NITIDA.

Scleroderma nitida, *Westw. Trans. Ent. Soc. Lond.* ii. 167. 4 ♀.

Hab. South of France.

5. SCLERODERMA UNICOLOR.

Scleroderma unicolor, *Westw. Trans. Ent. Soc. Lond.* ii. 167. 5 ♀.

Hab. Berlin.

6. SCLERODERMA FASCIATA.

Scleroderma fasciata, *Westw. Trans. Ent. Soc. Lond.* ii. 168. 6 ♀.

Hab. Berlin.

7. SCLERODERMA FORMICIFORMIS.

Scleroderma formiciformis, *Westw. Trans. Ent. Soc. Lond.* ii. 168. 7 ♀.

Hab. Berlin.

8. SCLERODERMA CYLINDRICA.

Scleroderma cylindrica, *Westw. Trans. Ent. Soc. Lond.* ii. 168. 8 ♀.

Hab. Albania.

9. SCLERODERMA RUFESCENS.

Omalus rufescens, *Nees ab Esen. Hym. Mon.* ii. 397. 7.
Scleroderma rufescens, *Westw. Trans. Ent. Soc. Lond.* ii. 168. 9 ♀.

Hab. Europe.

10. SCLERODERMA FUSCA.

Omalus fuscus, *Nees ab Esen. Hym. Mon.* ii. 396. 6 ♀.
Scleroderma fusca, *Westw. Trans. Ent. Soc. Lond.* ii. 169. 10.

Hab. Carlsruhe.

11. SCLERODERMA INTERMEDIA.

Scleroderma intermedia, *Westw. Trans. Ent. Soc. Lond.* ii. 169. 11. t. 15. f. 10.

Hab. Berlin.

12. SCLERODERMA MEXICANA.

Scleroderma Mexicana, *Westw. Trans. Ent. Soc. Lond.* ii. 169. 12 ♀.

Hab. Mexico.

13. SCLERODERMA CONTRACTA.

Scleroderma contracta, *Westw. Trans. Ent. Soc. Lond.* ii. 169. 13. t. 15. f. 11 ♀.

Hab. Carolina.

14. SCLERODERMA FUSCICORNIS.

Scleroderma? fuscicornis, *Westw. Trans. Ent. Soc. Lond.* ii. 172. 13. t. 15. f. 12 ♂.

Hab. France.

15. SCLERODERMA PICEA.

Scleroderma picea, *Westw. Trans. Ent. Soc. Lond.* ii. 170. 14 ♀.

Hab. Albania.

16. SCLERODERMA FULVICORNIS.

Scleroderma? fulvicornis, *Westw. Trans. Ent. Soc. Lond.* ii. 172. 14 ♂.

Hab. Berlin.

17. SCLERODERMA PEDUNCULUS.

Scleroderma pedunculus, *Westw. Trans. Ent. Soc. Lond.* ii. 170. 15 ♀.

Hab. Island of Zante.

18. SCLERODERMA MINUTA.

Scleroderma minuta, *Westw. Trans. Ent. Soc. Lond.* ii. 170. 16.

Hab. Albania (Previsa).

Tribe 2. FOSSORES, *Latr.*

Fam. 1. SCOLIADÆ, *Leach.*

Genus 7. MYZINE.

Scolia, pt., *Fabr. Ent. Syst.* ii. 236. 33 (1793).
Elis, pt., *Fabr. Syst. Piez.* p. 248 (1804).
Tiphia, pt., *Fabr. Ent. Syst.* ii. 225. 8 (1793); *Syst. Piez.* p. 232. 42 (1804).
Sapyga, pt., *Panz. Faun. Germ.* 87. 19 (?).
Myzine, *Latr. Hist. Nat. des Ins.* xiii. 269 (1804); *Gen. Crust. et Ins.* iv. 112 (1809).
Plesia, *Jurine, Hym.* (1817).

Latreille in the *Genera Insectorum*, 1809, united the genera

Myzine and *Plesia*, and the same opinion is adopted by Jurine, who unites them under the name of *Plesia*; Olivier, Panzer, and more recently M. Guérin, in a Monograph published in the *Dictionnaire pittoresque d'Histoire naturelle*, 1837, adopts a contrary opinion; they are reunited here on the authority of Edward Doubleday, who formed large collections of insects in the United States; his accuracy of observation is well known, and he stated that he had on numerous occasions detected the *Tiphia nanea* and *Elis sexcincta*, of Fabricius, "*in coitu*," which places the propriety of forming one genus for these insects beyond a doubt. Specimens of new species, sent as the sexes of the same, have been received from Mr. H. W. Bates, collected at Santarem, Brazil.

1. MYZINE SEXFASCIATA. B.M.

Scolia sexcincta, *Rossi, Faun. Etrus.* ii. 73. 839 (nec *Fabr.*).
Scolia sexfasciata, *Rossi, Faun. Etrus. Mant. App.* p. 136. t. 3. f. *c*; *Faun. Etrus. Ed. Illig.* ii. 116. 839.
Scolia volvulus, *Fabr. Ent. Syst. Supp.* p. 256. 38.
Scolia cylindrica, *Fabr. Ent. Syst.* ii. 238. 38.
Elis volvulus et cylindrica, *Fabr. Syst. Piez.* 249. 5. 6.
Myzine volvulus, *Latr. Hist. Nat. des Ins.* xiii. 269.
Myzine sexfasciata, *Spin. Ins. Lig.* i. 78. 1.
Myzine cylindrica, *Spin. Ins. Lig.* i. 79. 2.
Sapyga cylindrica, *Panz. Faun. Germ.* 87. 19?
Hellus cylindricus, *Panz. Faun. Germ. Revis.* ii. 262.
Myzine sexfasciata, *Guér. Dict. pitt. d'Hist. nat.* v. 575; *Icon. Règ. Anim. Ins.* p. 430. t. 69. f. 9.
Van d. Lind. Obs. Hym. Eur. 285. 1.
Lucas, Explo. Sc. Algér. iii. 283. t. 15. f. 8.
Plesia volvulus, *Latr. Gen. Cr. et Ins.* iv. 112 ♂.
St. Farg. Hym. iii. 580. 8 ♂, var.
Plesia sexfasciata, *St. Farg. Hym.* iii. 585. 13 ♂.
Plesia menechma, *St. Farg. Hym.* iii. 583. 11. var. ♂.

Hab. France; Italy; Germany; Algeria.

2. MYZINE GENICULATA. B.M.

Myzine geniculata, *Brullé, Expéd. Sc. de Morée, Zool.* iii. ♂.
Guér. Dict. pitt. d'Hist. nat. v. 575.

Hab. Morea.

3. MYZINE PARVULA. B.M.

Male. Length 3–3¾ lines.—Head and thorax rugose-punctate, the posterior margin of the prothorax sometimes incomplete,

a spot on the tegulæ, and the base of the tibiæ and tarsi yellow; the metathorax rugose; wings hyaline and iridescent. Abdomen strongly punctured, the base rugose; the apical margins of the second and following segments have an abbreviated transverse line in the middle, and a curved spot at the extreme lateral margins; the latter spot is sometimes ovate, with a black dot in the middle; beneath immaculate, the margins of the segments ciliated with short white hairs.

Hab. Albania.

4. MYZINE FLAVESCENS.

Plesia flavescens, *St. Farg. Hym.* iii. 582. 10.

Hab. Central Europe.

5. MYZINE SPINOSA.

Myzine spinosa, *Fisch. de Wald. Mag. Zool.* (1843) p. & t. 1.

Hab. Russia (Ural Mountains).

6. MYZINE ARCUATA.

Myzine arcuata, *Fisch. de Wald. Mag. Zool.* 1843, p. & t. 122.

Hab. Russia (Ural Mountains).

7. MYZINE GRACILIS.

Myzine gracilis, *Brullé, Hist. nat. Il. Canar.* iii. 90. 49. t. 3. f. 19.

Hab. Canary Islands.

8. MYZINE DIMIDIATA. B.M.

Myzine dimidiata, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 17 ♂.

Hab. Bombay; Bengal.

9. MYZINE ANTHRACINA. B.M.

Female. Length 6 lines.—Black, the head and thorax with large scattered punctures, the metathorax finely punctured, with a central smooth shining line at its base; the legs have a thin cinereous pubescence, and have their spines pale testaceous; wings subhyaline, slightly clouded at their apical margins. Abdomen shining; the segments are finely punctured at their basal margins, and with larger and scattered ones towards their apical margins; the second segment has a transverse impressed line at

its apical margin; beneath, the segments have a fringe of short white pubescence.

Hab. India.

10. MYZINE PETIOLATA.

Male. Length 4¼–5 lines.—Black, the head roughly punctured; the clypeus, mandibles, and a spot above each antenna pale yellow; the posterior margin of the prothorax, a spot on the tegulæ, the tibiæ and tarsi pale yellow; the anterior and intermediate tibiæ have a stripe behind, and the posterior pair, except at their base, black; wings hyaline and iridescent; on the pro- and metathorax the punctures are scattered, the metathorax opake and rugose, having a central impressed line at its base; the basal segment petiolate, its apex subglobose, the second segment slightly constricted; the apical margins of all the segments have a narrow yellow fascia, which is widened in the middle and at the extreme lateral margins.

Hab. India. (Coll. W.W. Saunders, Esq.)

11. MYZINE MADRASPATANA. B.M.

Female. Length 8 lines.—Head and thorax black, deeply and ruggedly punctured, the punctures on the prothorax and scutellum confluent; the head, thorax and legs have a few erect scattered glittering hairs; the apex of the joints of the tarsi rufo-piceous and furnished with rigid pale yellow hairs; wings dark brown, the posterior pair hyaline towards their base; the metathorax shining, delicately roughened towards the base and rugose behind, and having a longitudinal impressed line. Abdomen: the basal segment black, the second, third, and base of the fourth red, from thence to the apex black, and the apical segment longitudinally scabrous.

Hab. Madras.

12. MYZINE FUSCIPENNIS. B.M.

Female. Length 5–5½ lines.—Black and shining, head and prothorax having large distinct punctures, the latter subelongate; the mesothorax less coarsely and more sparingly punctured, the scutellum having large deep punctures, placed somewhat in lines; the metathorax rugose, most finely so towards the base, having a central channel, which is margined by two slightly elevated carinæ, truncated posteriorly; the legs have a number of pale testaceous spines, the calcaria of that colour; wings dark fuscous, paler towards their base, particularly the posterior pair. Abdomen strongly punctured at the base, more finely so towards

the apex, the margins of the two basal segments slightly constricted.

Hab. India.

13. MYZINE AURANTIACA.

Myzine aurantiaca, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 10 ♂.

Hab. Arabia.

14. MYZINE ARABICA.

Myzine Arabica, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 10 ♂.

Hab. Arabia.

15. MYZINE ZONATA. B.M.

Myzine zonata, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 12 ♂. *Savig. & Aud. Egypt.* p. 15. f. 22.

Hab. Egypt.

16. MYZINE SAVIGNYI.

Myzine Savignyi, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 11 ♂. *Savig. & Aud. Egypt.* p. 15. f. 23.

Hab. Egypt.

17. MYZINE RUFIPES.

Plesia rufipes, *St. Farg. Hym.* iii. 586. 14 ♂.

Hab. Egypt.

18. MYZINE NIGRIPES.

Myzine nigripes, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 13 ♂.

Hab. Egypt.

19. MYZINE AUDOUINII.

Myzine Audouinii, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 14 ♂. *Savig. & Aud. Egypt.* p. 15. f. 24.

Hab. Egypt.

20. MYZINE ÆGYPTIACA.

Myzine Ægyptiaca, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 7 ♂. *Savig. & Aud. Egypt.* t. 15. f. 27.

Hab. Egypt.

21. Myzine Rousselii. B.M.

Myzine Rousselii, *Guér. Rev. Zool.* i. 103 (1838) ♂.
Lucas, Explo. Sc. Algér. iii. 283. t. 15. f. 7.

Hab. Algeria.

22. Myzine Guerinii. B.M.

Myzine Guerinii, *Lucas, Explo. Sc. Algér.* iii. 283. t. 15. f. 5 ♂.

Hab. Algeria.

23. Myzine Oraniensis. B.M.

Myzine Oraniensis, *Lucas, Explo. Sc. Algér.* iii. 284. t. 15. f. 6 ♂.

Hab. Algeria.

24. Myzine abdominalis.

Plesia abdominalis, *Guér. Rev. Zool.* (1838) p. 57. 2 ♀.
St. Farg. Hym. iii. 579. 7.

Hab. Cape of Good Hope.

25. Myzine Capensis.

Myzine hæmorrhoidalis, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 3 ♂ (nec *Fabr.*).

Hab. Cape of Good Hope.

26. Myzine Servillei.

Myzine Servillei, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 6 ♂.

Hab. Cape of Good Hope.

27. Myzine capitata. B.M.

Male. Length 6 lines.—Black, head wider than the thorax, the vertex subquadrate, finely rugose; a transverse line above the insertion of the antennæ, the clypeus and mandibles, yellow, the latter rufo-piceous at their apex. Thorax strongly punctured, the metathorax opake and finely roughened; the posterior margin of the prothorax, a spot on the tegulæ, the tibiæ and tarsi, pale yellow; the tibiæ have a black stripe beneath, and the apical joints of the tarsi are rufo-testaceous; wings hyaline and iridescent. Abdomen blue, with metallic reflections of purple and green; the apical margins of the segments have pale yellow fasciæ, which are emarginate on each side; beneath, the yellow fasciæ are much attenuated, or interrupted in the middle, and terminate laterally in an angular spot.

Hab. Interior of South Africa.

28. MYZINE RUFICEPS. B.M.

Female. Length 8½ lines.—Head ferruginous, the scape, basal joint of the flagellum and the mandibles ferruginous, the tips of the latter black; the region of the ocelli black, and the face anteriorly fuscous; the punctures large and scattered, the vertex nearly impunctate; the prothorax subelongate, its posterior margin, the tegulæ and legs ferruginous; the pro- and mesothorax roughly punctured; the metathorax smooth and shining at its base, deeply punctured behind and having above a deep elongate central line; wings dark fuscous and iridescent. Abdomen shining, evenly and moderately punctured; beneath, the segments are rather finely punctured at their base, and have large deep scattered punctures towards their apical margins.

Hab. Port Natal.

29. MYZINE NODOSA.

Myzine nodosa, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 16 ♂.

Hab. Madagascar.

30. MYZINE UNICOLOR. B.M.

Female. Length 5 lines.—Black and shining, the anterior margin of the clypeus slightly produced in the middle, the sides waved, the face strongly punctured, the clypeus and vertex having a few scattered punctures; the face, cheeks, thorax beneath and the legs, have a thin cinereous pubescence; the prothorax closely and strongly punctured, the punctures scattered on the mesothorax, but close and delicate on the metathorax; wings subhyaline and iridescent; the legs rigidly spinose, the calcaria white; a few scattered silvery erect hairs on the metathorax, base and sides of the abdomen, which is highly polished and delicately punctured; beneath, the second segment having large scattered punctures; the following segments are delicately and closely punctured at the base and rugose towards their apical margins.

Hab. Australia (Swan River).

31. MYZINE SIGNATA. B.M.

Female. Length 8–10 lines.—Black, the head, prothorax and metathorax beneath, as well as the legs, having a thin griscous pubescence; the face roughly punctured, the vertex naked, shining and sparingly punctured. The prothorax strongly punctured, the punctures confluent; the mesothorax shining, the punctures large and scattered; the metathorax opake; the wings

dark fuscous, palest towards their apical margins; the legs densely spinose, their calcaria white. Abdomen shining, the punctures delicate and scattered, an impressed punctured line along the apical margins of the segments; the sixth segment rugose; the third segment having on each side a small orange spot; beneath, the margins of the segments have a fringe of short white hairs.

Hab. New Holland.

In smaller specimens the orange spot on the abdomen is sometimes obsolete.

32. MYZINE SABULOSA. B.M.

Female. Length 7 lines.—Black and shining, head rather finely punctured, thickly so on the face, sparingly on the vertex; the mandibles in the middle and the scape of the antennæ at their apex, ferruginous; the prothorax covered with large deep punctures, on the mesothorax and scutellum they are scattered; the mesothorax has on each side posteriorly, touching the margin of the scutellum, a short deeply impressed line; the metathorax closely and finely punctured; wings fusco-hyaline. Abdomen closely and rather finely punctured, most closely so at the basal margins of the segments; the first and second segments have a transverse impressed line near their apical margins; the margins slightly depressed; beneath, the margins of the segments ciliated with short white pubescence.

Hab. New Holland.

33. MYZINE DORSALIS.

Plesia dorsalis, *St. Farg. Hym.* iii. 576. 3 ♀.

Hab. Brazil.

34. MYZINE BIPUNCTATA.

Tiphia bipunctata, *Perty, Del. An. Art.* p. 139. t. 27. f. 12 ♀?

Hab. Brazil.

35. MYZINE DICHROA.

Meria dichroa, *Perty, Del. An. Art.* p. 139. t. 37. f. 13 ♀.

Hab. Brazil.

36. MYZINE FLAVO-PICTA. B.M.

Female. Length 7¼ lines.—Black, the head and thorax strongly punctured; a line on the orbits of the eyes, slightly

interrupted on their vertex, a large transverse macula above the insertion of the antennæ, the scape above and the anterior margin of the clypeus, yellow; the mandibles, and the anterior margin of the clypeus narrowly, rufo-piceous. The prothorax has a large spot on each side anteriorly, and a smaller spot on each side of its posterior margin, a quadrate spot on the disk of the mesothorax, a stripe on each side over the tegulæ, a spot on the scutellum, and the sides of the metathorax behind, yellow; the coxæ have a yellow spot beneath, the femora are yellow-testaceous beneath, and more or less so at their apex above; the tibiæ and tarsi are pale rufo-testaceous, yellowish beneath, and densely covered with pale testaceous spines; wings hyaline, the anterior pair having a dark fuscous stripe on their superior margins. Abdomen shining and iridescent, the first segment having a broad yellow fascia, much attenuated in the middle; the second an oblong spot on each side at its base, the third a continuous fascia at its basal margin, the fourth and fifth a fascia in the middle, the latter subinterrupted, yellow; beneath, the three basal segments have an angular spot on each side.

Male. Length 5–6 lines.—Black; a narrow line along the inner orbits of the eyes, the scape in front, a transverse line above, the clypeus, the labrum and mandibles, yellow, the tips of the latter black; a line on the posterior margin of the prothorax, an interrupted one on the collar, a quadrate spot on the mesothorax, the tegulæ, scutellum, and post-scutellum, a large ovate spot on each side of the metathorax, a spot beneath the wings, a dot behind, and the legs, yellow; the coxæ and base of the femora black, the former spotted with yellow; wings hyaline. The abdomen has a continuous band on the apical margins of all the segments yellow, that on the basal segment produced forwards on each side.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

37. MYZINE NITIDA. B.M.

Male. Length 5–5½ lines.—Black, head closely punctured; a line above the insertion of each antenna, another along the lower portion of the inner orbits of the eyes, the clypeus, labrum and mandibles, yellow, the latter ferruginous at their tips. Thorax strongly punctured, very closely on the metathorax, which is transversely rugose behind, and has also sometimes a yellow line on each side; the prothorax has an interrupted line on the collar, a continuous one on its posterior margin, a spot on the tegulæ, another on the disk of the mesothorax, a transverse one on the scutellum and post-scutellum, a stripe beneath the wings and a dot behind, yellow; the intermediate coxæ have a yellow spot at their base beneath, and the posterior pair a line behind; the

legs ferruginous; the wings hyaline, slightly fuscous at their extreme tips. Abdomen smooth and shining, the apical margins of the segments have a narrow yellow fascia, which is widened in the middle and at the extreme lateral margins; beneath, each segment has a small triangular yellow spot on its extreme lateral margins.

Hab. Jamaica.

38. MYZINE ROMANDII.

Plesia Romandii, *Guér. Rev. Zool.* (1838) p. 59. 9 ♀.

Hab. Isle of St. Thomas.

39. MYZINE SEXMACULATA.

Plesia sex-maculata, *Guér. Rev. Zool.* (1838) p. 57. 3.

Hab. Mexico.

40. MYZINE ANALIS.

Plesia analis, *Guér. Rev. Zool.* (1838) p. 58. 7 ♀.

Hab. Mexico.

41. MYZINE SEXCINCTA. B.M.

Scolia sexcincta, *Fabr. Syst. Ent.* p. 356. 9 ♂; *Ent. Syst.* ii. 236. 33.
Elis sexcincta, *Fabr. Syst. Piez.* p. 248. 1.
Myzine sexcincta, *Latr. Gen. Crust. et Ins.* iv. 112.
Guér. Dict. pitt. d'Hist. nat. v. 575. 1.
Tiphia maculata, *Fabr. Syst. Piez.* p. 233. 5. var. ♀.
Tiphia namea, *Fabr. Syst. Piez.* p. 233. 9 ♀.
Myzine namea, *Latr. Gen. Crust. et Ins.* iv. 112.
Meria collaris, et costata, var., *Say, Bost. Journ.* i. 361, 362.
Myzine similis, *Guér. Dict. pitt. d'Hist. nat.* v. 575. 2.
Plesia namea, *St. Farg. Hym.* iii. 577. 5.
Plesia sexcincta, *St. Farg. Hym.* iii. 584. 12 ♂.
Plesia maculata, *Guér. Rev. Zool.* (1838) p. 58. 8.

Hab. North America.

42. MYZINE PROXIMA.

Myzine proxima, *Guér. Dict. pitt. d'Hist. Nat.* v. 575. 2 ♂.

Hab. North America.

43. MYZINE OBSCURA. B.M.

Tiphia obscura, *Fabr. Syst. Piez.* p. 233. 8 ♀.
Plesia obscura, *St. Farg. Hym.* iii. 574. 1.
Plesia nigripes, *Guér. Rev. Zool.* (1838) p. 57. 5?
Hab. Carolina; Pennsylvania; Georgia.

44. MYZINE HÆMORRHOIDALIS.

Tiphia hæmorrhoidalis, *Fabr. Ent. Syst.* ii. 225. 8; *Syst. Piez.* p. 234. 12 ♀.
Plesia hæmorrhoidalis, *Guér. Rev. Zool.* (1838) p. 60. 11.
St. Farg. Hym. iii. 578. 6.
Hab. North America.

45. MYZINE SELLATA.

Plesia sellata, *St. Farg. Hym.* iii. 577. 4.
Hab. Islands of America.

46. MYZINE SERENA.

Tiphia serena, *Fabr. Syst. Piez.* p. 234. 10 ♀.
Plesia serena, *Guér. Rev. Zool.* (1838) p. 59. 10.
St. Farg. Hym. iii. 575. 2.
Hab. Carolina; Pennsylvania.

47. MYZINE FULIGINOSA. B.M.

Plesia fuliginosa, *St. Farg. Hym.* iii. 581. 9.
Hab. Pennsylvania.

48. MYZINE EPHIPPIUM.

Tiphia ephippium, *Fabr. Ent. Syst.* ii. 225. 10 ♀; *Syst. Piez.* p. 234. 14.
Guér. Rev. Zool. (1838) p. 57. 1.
Hab. North America.

49. MYZINE FLAVIPES.

Plesia flavipes, *Guér. Rev. Zool.* (1838) p. 58. 6 ♀.
Hab. North America.

50. MYZINE INTERRUPTA.

Tiphia interrupta, *Say, Nar. Exped. St. Peter's River, Append.* p. 66. 2.
Hab. Pennsylvania.

51. MYZINE VICINA.

Plesia vicina, *Guér. Rev. Zool.* (1838) p. 57. 4 ♀.

Hab. Not known.

Genus 8. MERIA.

Tiphia, pt., *Rossi, Faun. Etrus.* ii. 69 (1790).
Bethylus, pt., *Fabr. Syst. Piez.* p. 236 (1804).
Meria, *Illig. Ed. Faun. Etrus.* ii. 107 (1807).
Tachus, *Jurine, Hym.* p. 154 (1807).

1. MERIA TRIPUNCTATA. B.M.

Tiphia tripunctata, *Rossi, Faun. Etrus.* ii. 69. 831. t. 4. f. 10.
Latr. Hist. Nat. xiii. 268. 3.
Panz. Faun. Germ. 47. 20.
Spin. Ins. Lig. i. 81. 4.
Bethylus Latreillii, *Fabr. Syst. Piez.* p. 237. 4. var.
Bethylus tripunctatus, *Panz. Krit. Revis.* ii. 134. var.
Meria Latreillii, *Illig. Ed. Faun. Etrus.* ii. 107. 831. t. 9. f. 10.
Latr. Gen. Crust. et Ins. iv. 114.
Klug, Beit. zur Nat. ii. 199. 1.
Westw. Proc. Zool. Soc. (1835) p. 53. 4.
Meria tripunctata, *Latr. Gen. Crust. et Ins.* iv. 114.
Van d. Lind. Obs. Hym. d'Eur. 286. 1.
Guér. Rev. Zool. (1840) p. 363. 1.
Lucas, Explo. Sc. Algér. iii. 287.
Tachus dimidiatus, *Spin. Ins. Lig.* ii. 31. t. 1. f. 1 ♀.
Meria dimidiata, *Latr. Gen. Crust. et Ins.* iv. 114. var.
Van d. Lind. Obs. Hym. d'Eur. 286. 2.
Meria rufiventris, *Klug, Beit. zur Nat.* ii. 200. 3. var.
Meria nitidula, *Klug, Beit. zur Nat.* ii. 199. 2. var.
Meria Millefolii, *St. Farg. & Serv. Ency. Méth.* x. 294. var.

Hab. France; Italy; Germany; Spain; Portugal.

2. MERIA SPINOLÆ.

Meria Spinolæ, *Westw. Proc. Zool. Soc.* (1835) p. 53. 2.
Meria rufifrons, *Guér. Rev. Zool.* (1840) p. 365. 3.
Larra rufifrons, *Fabr. Ent. Syst.* ii. 222. 7?

M. Guérin considers this species identical with the *Larra rufifrons* of Fabricius, but that is said to be from India, which renders the quotation doubtful; and the size of *M. rufifrons* is given as 7 lines, that of *M. Spinolæ* 10 lines.

Hab. Sierra Leone.

3. MERIA KLUGII. B.M.

Meria Klugii, *Westw. Proc. Zool. Soc.* (1835) p. 53. 1.
Guér. Rev. Zool. (1840) p. 365. 3.

Hab. Sierra Leone; South Africa. (Coll. Dr. A. Smith.)

4. MERIA ABDOMINALIS.

Meria abdominalis, *Guér. Rev. Zool.* (1840) p. 365. 5.

Hab. Cape of Good Hope.

5. MERIA THORACICA.

Meria thoracica, *Guér. Rev. Zool.* (1840) p. 365. 6.

Hab. Arabia.

6. MERIA LIMATA. B.M.

Female. Length 3½ lines.—Head and thorax black and shining, the clypeus, mandibles, and organs of the mouth ferruginous, the flagellum and tip of the scape rufo-piceous; head subrotundate, wider than the thorax, impunctate. The prothorax having a few scattered punctures, the metathorax oblique, highly polished and impunctate; wings subhyaline, nervures ferruginous, stigma fuscous; legs rufo-piceous, their articulations and the tarsi ferruginous. Abdomen entirely bright ferruginous, the second and third segments having at their extreme lateral margins an oblique narrow elongate-ovate white spot.

Hab. Interior of South Africa. (Presented by the Earl of Derby.)

Very closely resembling *M. tripunctata*, but the head is of a different form, the metathorax impunctate, and the abdomen entirely red.

Genus 9. TIPHIA.

Tiphia, pt., *Fabr. Ent. Syst.* ii. 223 (1793).
Bethylus, pt., *Panz. Krit. Revis. Faun. Germ.* ii. 134 (1805–6).

1. TIPHIA FEMORATA. B.M.

Tiphia femorata, *Fabr. Syst. Ent.* p. 353. 1 ♀.
Rossi, Faun. Etrus. ii. 67. 828.
Panz. Faun. Germ. p. 53. 3.
Latr. Hist. Nat. xiii. 267.
Jurine, Hym. p. 149. t. 9. f. 11.
Spin. Ins. Lig. i. 81. 1.
St. Farg. & Serv. Ency. Méth. x. 655.

Tiphia femorata, *Van d. Lind. Obs. Hym. d'Eur.* p. 279. 1.
Shuck. Foss. Hym. p. 39. 1 ♂ ♀.
St. Farg. Hym. iii. 573. 1. t. 36. f. 2 ♀.
Nyland. Ap. Boreal. p. 19. 1.
Wesm. Hym. Fouis. Belg. p. 23. 1 ♂ ♀.
Bethylus femoratus, *Panz. Faun. Germ.*; *Krit. Revis.* ii. 134 ♀.
Tiphia villosa, *Fabr. Syst. Piez.* p. 235. 22 ♂.
Latr. Hist. Nat. xiii. 267.
Van d. Lind. Obs. p. 280. 2.
Bethylus villosus, *Panz. Faun. Germ.* 98. 16.

Hab. Britain; Italy; France; Germany.

2. TIPHIA MORIO. B.M.

Tiphia morio, *Fabr. Syst. Piez.* p. 235.
Panz. Faun. Germ. 55. 1.
Van d. Lind. Obs. p. 280. 3.
Shuck. Foss. Hym. p. 41. 2.
St. Farg. Hym. iii. 557. 7?
Nyland. Ap. Boreal. p. 23. 2.
Bethylus morio, *Panz. Krit. Revis.* p. 134.

Hab. Britain; France; Germany; Hungary; Finland.

3. TIPHIA MINUTA. B.M.

Tiphia minuta, *Van d. Lind. Obs.* p. 282. 4.
Shuck. Foss. Hym. p. 42. 3.
St. Farg. Hym. iii. 558. 9.
Nyland. Ap. Boreal. p. 24. 3.
Wesm. Hym. Fouis. Belg. p. 23. 2.

Hab. Italy; Brussels; Britain.

4. TIPHIA COMPRESSA. B.M.

Female. Length 5 lines.—Black and shining, head compressed, the face strongly punctured, the vertex, which is narrow, sparingly so; the mandibles and scape at the apex beneath, ferruginous; the flagellum rufo-fuscous beneath; the mesothorax and prothorax in front strongly punctured, the posterior margin of the latter smooth and shining; the superior wings fusco-hyaline, the posterior pair clear; the metathorax smooth, subopake, the superior surface having three longitudinal elevated lines, which extend to the transverse one on the verge of the truncation, the latter smooth and shining; the legs have a glittering silvery pubescence; the calcaria, claws and spines which arm the apex of the joints of the tarsi, ferruginous; the femora behind

rufo-piceous. Abdomen: the basal segment smooth and shining, the second has a few scattered delicate punctures, the four apical segments strongly punctured.

Hab. China; Philippine Islands.

5. TIPHIA HIRSUTA.

Male. Length 4 lines.—Black; head and thorax strongly punctured, the flagellum beneath, its apical joint, the anterior margin of the clypeus, the mandibles and palpi, ferruginous; the metathorax slightly punctured, and having three longitudinal carinæ which unite with the transverse one at the verge of the truncation; wings fusco-hyaline, the tegulæ, anterior tibiæ at their apex, the tibiæ, the intermediate tarsi, and the apical joints of the posterior pair, ferruginous; the first and second segments finely punctured, the third and fourth segments impunctate at their basal and punctured at their apical margins, the apical segments entirely punctured; the entire insect covered with cinereous pubescence.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

6. TIPHIA RUFIPES.

Female. Length 3 lines.—Black and shining; antennæ, anterior margin of the clypeus, mandibles and palpi, ferruginous; the head, prothorax and mesothorax rather strongly punctured; metathorax smooth and shining, the superior surface having three longitudinal elevated carinæ which unite with the transverse one on the verge of the truncation; wings hyaline, tegulæ and nervures ferruginous; the legs ferruginous; abdomen sparingly punctured towards the base, more densely towards the apex; sprinkled with erect white hairs.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

7. TIPHIA RUFO-FEMORATA.

Female. Length 5 lines.—Black and shining, the head having numerous fine scattered punctures, the apical half of the mandibles ferruginous; the prothorax anteriorly, the mesothorax and scutellum, strongly punctured; the metathorax smooth and shining, the superior surface having three longitudinal elevated carinæ, which unite with the transverse carina at the verge of the truncation; wings fuscous, the intermediate and posterior femora red. Abdomen rather finely punctured, the first and second segments very sparingly so.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

8. TIPHIA RUFICORNIS.

Tiphia ruficornis, *St. Farg. Hym.* iii. 555. 4 ♀.
Lucas, Explo. Sc. Algér. iii. 286.

Hab. Algeria; Genoa.

9. TIPHIA BREVIPENNIS. B.M.

Tiphia brevipennis, *Lucas, Explo. Sc. Algér.* iii. 299. 285. t. 15. f. 9.

Hab. Algeria.

10. TIPHIA CAPENSIS.

Tiphia Capensis, *St. Farg. Hym.* iii. 554. 1 ♀.

Hab. Cape of Good Hope.

11. TIPHIA CHALYBEA.

Female. Length 6 lines.—Head and prothorax blue-green; the mesothorax, legs and abdomen of a steel-blue; the head and thorax with large scattered punctures; the metathorax subrugose, the superior surface having three longitudinal elevated lines, the central one abbreviated, not extending to the transverse one upon the verge of the truncation; wings dark fuscous. Abdomen having large scattered punctures, those at the base of the segments finer and closer.

Hab. Brazil. (Coll. F. Smith.)

12. TIPHIA NITIDA. B.M.

Female. Length 5½ lines.—Black, smooth and shining, the head covered with large deep punctures; the flagellum beneath towards the base and the mandibles ferruginous; the prothorax has a few scattered punctures, the posterior margin of the scutellum also slightly punctured, the metathorax impunctate, the superior surface having three longitudinal carinæ, the middle one abbreviated, not extending to the carina on the verge of the truncation which is continued along the lateral margins; wings slightly fuscous; the calcaria and spines which arm the joints of the tarsi, ferruginous. Abdomen: the first and second segments having a few scattered delicate punctures, the two following segments punctured at their basal and apical margins, the two apical ones more strongly punctured; beneath, strongly punctured, particularly the second segment, which is covered with large deep shallow punctures.

Hab. Jamaica.

13. TIPHIA CAJENNENSIS.

Tiphia Cajennensis, *St. Farg. Hym.* iii. 555. 3 ♀.

Hab. Cayenne.

14. TIPHIA FLAVIPENNIS.

Tiphia flavipennis, *St. Farg. Hym.* iii. 555. 2 ♀.

Hab. California.

15. TIPHIA ALBILABRIS.

Tiphia albilabris, *St. Farg. Hym.* iii. 556. 5 ♂.

Hab. California.

16. TIPHIA TARDA. B.M.

Tiphia tarda, *Say, Bost. Journ.* i. 300.

Hab. N. America (Indiana); St. John's Bluff.

17. TIPHIA INORNATA. B.M.

Tiphia inornata, *Say, Nar. Exped. St. Peter's River, App.* p. 66. 1.

Hab. Ohio; Pennsylvania.

18. TIPHIA INTERRUPTA.

Tiphia interrupta, *Say, Nar. Exped. St. Peter's River, Append.* 66. 2.

Hab. Pennsylvania.

Genus 10. EPOMIDIOPTERON.

Epomidiopteron, *Romand, Ann. Soc. Ent. Fr.* iv. 653 (1835).

1. EPOMIDIOPTERON JULII. B.M.

Epomidiopteron Julii, *Ann. Soc. Ent. Fr.* iv. 653 ♂.
Trans. Ent. Soc. Lond. ii. 149. t. 14. f. 1 ♀.

Hab. Brazil (Para). (Coll. H. W. Bates.)

Genus 11. SCOLIA.

Sphex, pt., *Drury, Exot. Ins.* i.
Scolia, *Fabr. Ent. Syst.* p. 355 (1775).
Tiphia, pt., *Fabr. Ent. Syst.* ii. 226 (1793); *Syst. Piez.* p. 235 (1804).

Elis, pt., *Fabr. Syst. Piez.* p. 248 (1804).
Campsomeris, *St. Farg. Hym.* iii. 496 (1845).
Colpa, *St. Farg. Hym.* iii. 534 (1845).
Myzine, *Fisch. d. Wald. Guér. Mag. Zool.* (1833).

Div. I.—*The superior wings having two submarginal cells and one recurrent nervure.*

1. Scolia erythrocephala. B.M.

Scolia erythrocephala, *Fabr. Ent. Syst. Supp.* p. 255. 16 ♀?; *Syst. Piez.* p. 242. 23.
Van. d. Lind. Foss. Eur. p. 26. 13.
St. Farg. Hym. iii. 529. 18 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 279. t. 15. f. 3.
Burm. Abh. Nat. Ges. Halle, i. 31. 40.
Scolia pubescens, *Klug, Symb. Phys.* dec. iii. t. 26. f. 7 ♂, 8 ♀.
Scolia vagans, *Klug, Symb. Phys.* dec. iii. t. 26. f. 6 ♂, var.
Scolia rutila, *Klug, Symb. Phys.* dec. iii. t. 26. 9 ♂. 10 ♀.
Scolia flaviceps, *Eversm. Bull. Mosc.* (1846) i. 441. 8. t. 5. f. 3?
Scolia unifasciata, *Fabr. Syst. Piez.* p. 243. 26 ♂, var.?
Lucas, Explo. Sc. Algér. iii. 279. 285.

Hab. France; Spain; The Caucasus; Egypt; Algeria.

2. Scolia insubrica. B.M.

Scolia insubrica, *Rossi, Faun. Etrus.* ii. 72. 837; *Mant.* t. 8. f. F, G.
Klug, Weber & Mohr, Beitr. i. 26. 11.
Van. d. Lind. Hym. Foss. Eur. 25. 11.
Brullé, Expéd. Sc. de Morée, iii. 370. 816.
St. Farg. Hym. iii. 530. 19.
Burm. Abh. Nat. Ges. Halle, i. 31. 40.

Hab. Italy; Tuscany; Albania.

3. Scolia bicincta. B.M.

Scolia bicincta, *Rossi, Faun. Etrus.* ii. 71. 836; *Mant.* t. 8. f. D, E.
Klug, Weber & Mohr, Beitr. i. 27. 14.
Scolia hirta, *Schrank, Ins. Austr.* 22.
Scolia notata, *Fabr. Ent. Syst. Supp.* p. 255. 24; *Syst. Piez.* p. 244. 31.
Burm. Abh. Nat. Ges. Halle, i. 35. 55.
Scolia signata, *Panz. Faun. Germ.* 62. 13.
Scolia bifasciata, *St. Farg. Hym.* iii. 531. 20.

Hab. Italy; S. France; Albania; Portugal.

4. SCOLIA TRIDENS. B.M.

Scolia tridens, *Fabr. Ent. Syst.* ii. 232. 17; *Syst. Piez.* p. 242. 21.
Scop. Ins. Lig. fasc. i. 75. 4.
Burm. Abh. Nat. Ges. Halle, i. 34. 53.
Scolia Dejeanii, *Van d. Lind. Hym. Eur.* 27. 15.

Hab. South Europe.

5. SCOLIA MELANOPTERA. B.M.

Scolia melanoptera, *Klug, Symb. Phys.* dec. iii. t. 26. f. 14 ♂.
Scolia biguttata, *Van. d. Lind. Foss. Eur.* 31. 18.
Scolia sicula, *St. Farg. Hym.* iii. 529. 17.
Scolia Schrenkii, *Eversm. Bull. Soc. Mosc.* (1846) i. 441. 7. t. 4. f. 2.

Scolia fasciata punctata, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 254?

Hab. South Europe; Egypt.

6. SCOLIA 4-PUNCTATA. B.M.

Scolia 4-punctata, *Fabr. Ent. Syst.* ii. 236. 32; *Syst. Piez.* p. 245. 39.
Klug, Weber & Mohr, Beitr. i. 28. 15.
Van d. Lind. Obs. 30. 17.
Brullé, Expéd. Sc. de Morée, iii. 370. 817.
St. Farg. Hym. iii. 533. 22.
Burm. Abh. Nat. Ges. Halle, i. 32. 42.
Lucas, Explo. Sc. Algér. iii. 281. 289.
Scolia violacea, *Panz. Faun. Germ.* 66. 18.

Hab. Italy; France; Germany; Albania; Spain.

7. SCOLIA 4-PUSTULATA. B.M.

Larra 4-pustulata, *Fabr. Ent. Syst.* ii. 222. 6 ♀.
Scolia 4-pustulata, *Fabr. Syst. Piez.* p. 244. 34.
St. Farg. Hym. iii. 528. 16.
Burm. Abh. Nat. Ges. Halle, i. 36. 58.
Scolia binotata, *Fabr. Syst. Piez.* p. 244. 36 ♂.
Scolia fasciato-punctata, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 254?
Scolia fervida, *Smith, Ann. & Mag. Nat. Hist.* ix. ser. 2. 1852, 46 ♀, var.?

Hab. Tranquebar; Sumatra; Madras.

8. SCOLIA CÆRULANS. B.M.

Scolia cerulans, *St. Farg. Hym.* iii. 526. 11.
Scolia cyanipennis, *Fabr. Syst. Piez.* p. 244. 35?

Hab. India.

9. SCOLIA DECORATA.

Scolia decorata, *Burm. Abh. Nat. Ges. Halle*, i. 30. 39.

Hab. Sumatra.

10. SCOLIA ERRATICA. B.M.

Scolia verticalis, *Burm. Abh. Nat. Ges. Halle*, i. 37. 61 (nec *Fabr.*) ♂ ♀.

Length 6–12 lines.—Black, punctured and pubescent; the head above the antennæ, and also the base of the latter red; the wings dark fuscous, with a purple iridescence; abdomen black, and having a purple or violet iridescence; the prothorax sometimes red.

Hab. India; Sumatra.

11. SCOLIA INSTABILIS. B.M.

Female. Length 10 lines.—Head and thorax black, the face and thorax in front deeply punctured; the clypeus, vertex and metathorax smooth, shining and impunctate, the latter covered with hoary pile; the flagellum bright orange, except the basal segment, which is black; wings dark fuscous, with a splendid violet iridescence. Abdomen black, with a changeable purple and violet reflection, having a small tubercle at the base.

Male.—Bears a close resemblance to the female, but has the flagellum entirely orange-red beneath, above fuscous, except three or four of the apical joints, which are orange; the head and thorax are entirely punctured, the basal segment being campanulate.

Hab. India.

12. SCOLIA PULCHRA. B.M.

Female. Length 11 lines.—Head yellow; antennæ clypeus and mandibles fulvous-red, tips of the latter black, the space between the ocelli black. Thorax rufo-testaceous, the prothorax above and the tegulæ fulvous, the legs ferruginous; the wings yellow-hyaline, of a deep yellow along their anterior margins, and having a dark purple spot at their apex beyond the marginal cell; the entire pubescence fulvo-ferruginous. Abdomen fulvo-ferruginous, above black, except at the extreme base; the second segment has a broad yellow band, deeply emarginate in the middle of its posterior margin, and also an emargination on each side; the two following segments have a broad yellow fascia, interrupted in the middle; the second and third segments fringed with black pubescence on their apical margins; the fourth and fifth fringed with bright fulvous pubescence, entirely covered

with scattered fulvous hairs; beneath fulvo-ferruginous, the third, fourth and fifth segments broadly dark rufo-piceous at their base.
Hab. India.

13. SCOLIA SPECIFICA.

Female. Length 9 lines.—Black; the mandibles ferruginous at their apex; a yellow stripe on each side of the prothorax, before the insertion of the wings, the latter fuscous, with a slight purple iridescence towards their apex; the second, third and fourth segments have on each side a large yellow macula, pointed within; the two first sometimes, the third usually united; the maculæ on the second segment have a black dot towards their oute rmargins; the fifth segment having two minute yellow spots in the middle.

Hab. India. (Coll. W. W. Saunders, Esq.)

14. SCOLIA VIVIDA. B.M.

Male. Length 6 lines.—Black; the clypeus, mandibles and outer orbits of the eyes yellow; the prothorax above, the collar, a large patch beneath the wings, a narrow stripe on the breast in front, the anterior coxæ in front, the tibiæ and tips of the femora above, the basal joint of the anterior and intermediate tarsi above, and the scutellum and post-scutellum, yellow; the wings subhyaline, with some fusco-ferruginous stains towards the anterior margins of the superior pair, and a dark fuscous spot beyond the marginal cell, the nervures ferruginous, tegulæ testaceous. Abdomen yellow above; the apical margins of the four basal segments have a narrow black fascia; the three apical segments black; the femora and metathorax ferruginous, the latter more or less stained with black at the base above.

Hab. Madras.

15. SCOLIA FERVIDA.

Scolia fervida, *Smith, Ann. & Mag. Nat. Hist.* ix. 2nd Ser. 1852, 46 ♀.

Hab. E. Indies (Poona). (Mus. India House.)

This is possibly an extremely highly coloured form of *S. 4-pustulata*, but the red colouring occupies the second and two following segments, also the basal margin of the fifth: a series of varieties would probably unite it to *4-pustulata*.

16. SCOLIA OBSCURA. B.M.

Scolia obscura, *St. Farg. Hym.* iii. 527. 14 ♀.

Hab. India.

17. SCOTIA VĘNUSTA.

Female. Length 9 lines.—Black, a transverse yellow spot in front of the vertex, the face having a bright fulvous pubescence, the clypeus naked. Thorax clothed with bright rufo-fulvous pubescence; the wings fulvo-hyaline, the anterior margin of the superior wings bright fulvous, having a dark cloud beyond the submarginal cell, the upper portion of the second submarginal cell also clouded; the nervures ferruginous, the tegulæ ferruginous; the pubescence, spines and setæ on the legs fulvo-ferruginous, the tibiæ and tarsi rufo-piceous. Abdomen: the second segment having a broad yellow fascia which is slightly emarginate in the middle of its anterior and posterior margins; the fascia not extending to the lateral margins, the extremities deeply notched; the third segment has a similar but broader band, interrupted in the middle and rounded at the ends; the basal segment covered with, and the apical margins of the segments having a long dense fringe of bright fulvo-ferruginous pubescence.

Male.—Closely resembles the female, but differs in having the second and third segments of the abdomen yellow, the fourth has a central interrupted band.

Hab. India. (Coll. W. W. Saunders, Esq.)

18. SCOLIA APICICORNIS.

Scolia apicicornis, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 253.

Hab. India?; Senegal?.

19. SCOLIA APICALIS.

Scolia apicalis, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 254.

Hab. India or Senegal.

20. SCOLIA CEPHALOTES.

Scolia cephalotes, *Burm. Abh. Nat. Ges. Halle*, i. 37. 60.

Hab. Java.

21. SCOLIA CYANIPENNIS. B.M.

Scolia cyanipennis, *Fabr. Syst. Piez.* p. 244. 35.
Burm. Abh. Nat. Ges. Halle, i. 37. 59.

Hab. Java.

22. SCOLIA FLAVO-PICTA. B.M.

Female. Length 10 lines.—Black; the posterior angles of the metathorax have a large yellow macula; the wings flavo-hyaline, the anterior margin of the superior wings of the deepest yellow, the apex slightly fuscous. Abdomen: the basal segment has a transverse yellow fascia, slightly interrupted in the middle; the second segment has a broad yellow band occupying nearly the entire segment, deeply emarginate in the middle, anteriorly, and having laterally a small black dot; the third segment has a broad yellow fascia, emarginate in the middle anteriorly, and attenuated towards the lateral margins; the fourth segment an abbreviated transverse yellow stripe in the middle, which is slightly emarginate.

Hab. Java.

23. SCOLIA PERSONATA. B.M.

Male. Length 1 in. 4 lines.—Black; a minute yellow spot in the emargination of the eyes, from which a narrow line descends half-way down the inner orbits of the eyes. Thorax: the sides, beneath, and the metathorax clothed with black pubescence; the wings dark fuscous, and having a rich purple iridescence. The basal segment of the abdomen campanulate, produced into a pointed tubercle, on the middle, at its base; the third segment having a broad orange fascia, subinterrupted in the middle; the sides and margins of the segments have a thick fringe of black pubescence.

Hab. Silhet.

24. SCOLIA LÆVICEPS. B.M.

Female. Length 6 lines.—Black; the head smooth and shining; the clypeus prominent, smooth and shining, the face depressed on each side, and covered with cinereous pubescence. Thorax impressed with large deep punctures, the prothorax having a thin cinereous pubescence; the wings having a bright violet iridescence. Abdomen strongly punctured, with a few cinereous hairs at the sides and beneath.

Male.—Strongly punctured, the abdomen thinly covered with short erect black pubescence, the wings having a brilliant purple iridescence.

Hab. Hong Kong.

25. SCOLIA MODESTA. B.M.

Female. Length 4½ lines.—Black; the head smooth, shining and impunctate, the face on each side of the clypeus having long

white pubescence; above the insertion of the antennæ is a little yellow pubescence, that on the thorax and legs is of the same colour, the thorax shining above, having a few scattered large punctures; wings subhyaline, the nervures fuscous. Abdomen: the apical margins of the first and three following segments have a narrow yellow fascia, that on the first widest, and deeply emarginate in the middle; the two following have on each side a round macula which unites with the marginal fascia.

Male.—The clypeus, a spot above it, and the orbits of the eyes, interrupted on their vertex, yellow; an oblique line on each side of the thorax before the insertion of the wings, a spot beneath the wings, the scutellum and post-scutellum, and a large spot on each side of the metathorax, yellow. Abdomen: all the segments have on each side a large ovate yellow macula, the apical segment ferruginous, impunctate, and armed with three black spines; the tibiæ, tarsi and knees rufo-testaceous.

Hab. Philippine Islands.

26. SCOLIA MICANS.

Scolia micans, *Guér. Voy. Coq. Zool.* ii. pt. 2. 251 ♀.

Hab. Isle Bourou, Moluccas.

27. SCOLIA MENDICA.

Scolia mendica, *Klug, Symb. Phys.* dec. iii. t. 26. f. 15 ♂.
Burm. Abh. Nat. Ges. Halle, i. 32. 45.

Hab. Egypt.

28. SCOLIA INTERSTINCTA. B.M.

Scolia interstincta, *Klug, Weber & Mohr, Beitr.* i. 36. 33.
Klug, Symb. Phys. dec. iii. t. 26. f. 13 ♂.
Burm. Abh. Nat. Ges. Halle, i. 33. 46.

Hab. Egypt.

29. SCOLIA SYRIACA.

Scolia Syriaca, *Klug, Symb. Phys.* dec. iii. t. 26. f. 5 ♂.
Scolia dispar (var.), *Burm. Abh. Nat. Ges. Halle,* i. 34. 51.

Hab. Syria.

30. SCOLIA FUNEREA. B.M.

Scolia funerea, *Klug, Symb. Phys.* dec. iii. t. 27. f. 1 ♂. 2 ♀.
Burm. Abh. Nat. Ges. Halle, i. 38. 65.

Hab. Syria; Egypt; Tunis.

31. SCOLIA DISPAR.

Scolia dispar, *Klug, Symb. Phys.* dec. iii. t. 26. f. 1 ♂. 2 ♀. *Burm. Abh. Nat. Ges. Halle,* i. 34. 51.
Scolia lateralis, *Klug, Symb. Phys.* dec. iii. t. 26. f. 3 ♂. 4 ♀, var.?

Hab. Egypt; Arabia.

32. SCOLIA INFUSCATA.

Scolia infuscata, *Klug, Symb. Phys.* dec. iii. t. 26. f. 11 ♂. 12 ♀. *Burm. Abh. Nat. Ges. Halle,* i. 34. 52.

Hab. Nubia (Dongola).

33. SCOLIA VARICOLOR. B.M.

Scolia varicolor, *Lucas, Explo. Sc. Algér.* iii. 280. 288. t. 15. f. 2 ♀.
Scolia longicornis, *St. Farg. Hym.* iii. 526. 13 ♂?

Hab. Algeria.

34. SCOLIA DISTINCTA.

Scolia distincta, *Lucas, Explo. Sc. Algér.* iii. 280. 287. t. 15. f. 1.

Hab. Algeria.

35. SCOLIA CHRYSOTRICHA.

Scolia chrysotricha, (*Klug MSS.*) *Burm. Abh. Nat. Ges. Halle,* i. 32. 43.

Hab. Cape of Good Hope.

36. SCOLIA ERYTHROPYGA.

Scolia erythropyga, (*Klug, MSS.*) *Burm. Abh. Nat. Ges. Halle,* i. 33, 50.

Hab. Cape of Good Hope.

37. SCOLIA AFFINIS. B.M.

Scolia affinis, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 254.

Hab. Senegal; Sierra Leone.

38. SCOLIA FULVOFIMBRIATA. B.M.

Scolia fulvofimbriata, *Burm. Abh. Nat. Ges. Halle,* i. 32. 44.
Scolia apicicornis, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 253?

Hab. Cape of Good Hope.

39. SCOLIA MAURA. B.M.

Scolia maura, *Fabr. Ent. Syst.* ii. 233.20 ♂; *Syst. Piez.* p. 243.27.
Coqueb. Illust. Icon. Ins. dec. ii. 57. t. 13. f. A, B, C.
Lucas, Explo. Sc. Algér. iii. 279. 286.
Guér. Voy. Abyss. (*Lefeb.*) vi. 355.

Hab. Africa; Algeria (Oran); Barbary; Abyssinia.

40. SCOLIA MELANARIA. B.M.

Scolia melanaria, *Burm. Abh. Nat. Ges. Halle*, i. 38. 63 ♂.

Hab. Cape of Good Hope; Port Natal.

41. SCOLIA SENEX.

Male. Length 7 lines.—Black, clothed entirely, but thinly, with cinereous pubescence; the wings flavo-hyaline, the nervures pale ferruginous; the superior wings have a dark cloud at their anterior margins beyond the marginal cell; the apical margins faintly clouded; the tibiæ and tarsi ferruginous; the two apical segments of the abdomen ferruginous, the apex armed with three black spines.

Hab. Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

42. SCOLIA AUREIPENNIS. B.M.

Scolia aureipennis, *St. Farg. Hym.* iii. 525. 9 ♀.

Hab. South Africa (Gambia).

43. SCOLIA CYANEA. B.M.

Scolia cyanea, *St. Farg. Hym.* iii. 525. 10 ♂.
Burm. Abh. Nat. Ges. Halle, i. 38. 64.

Hab. Cape of Good Hope; Port Natal.

44. SCOLIA FRATERNA. B.M.

Female. Length 11 lines.—Black; the crown of the head very smooth and shining; the prothorax, the mesothorax and scutellum with large deep punctures; the wings nearly black, and having a splendid violet iridescence. Abdomen entirely covered with distinct punctures, most sparing on the second and third segments in the middle.

The male resembles the female, but is rather smaller.

This species closely resembles *S. cyanipennis* of St. Fargeau, but is at once known from that species, which has the disk of the thorax very smooth, with a few widely scattered punctures, by having the disk covered with large deep punctures.

Hab. Port Natal.

45. SCOLIA RUFICORNIS. B.M.

Scolia ruficornis, *Fabr. Ent. Syst.* ii. 230. 9; *Syst. Piez.* p. 241. 11.
St. Farg. Hym. iii. 524. 8 ♂.
Guér. Voy. Abyss. (*Lefeb.*) vi. 353.
Burm. Abh. Nat. Ges. Halle, i. 38. 62 ♂ ♀.
Scolia castanea, *Perch. Gen. Ins. Hym.* t. 2.

Hab. Senegal; Abyssinia.

46. SCOLIA RUFIPES. B.M.

Male. Length 6 lines.—Blue-black, the abdomen having a bright violet iridescence, and the entire insect a thinly scattered hoary pubescence; the mandibles, apical half of the femora, the tibiæ and tarsi, ferruginous; the tarsi slightly fuscous above; wings dark fuscous, with a bright coppery iridescence, inclining to purple in certain lights.

Hab. Port Natal.

47. SCOLIA VIOLACEA.

Campsomeris violacea, *St. Farg. Hym.* iii. 502. 11 ♀.

Hab. Port Praslin; New Ireland.

48. SCOLIA IRIDICOLOR.

Male. Length 10 lines.—Head and thorax dark fusco-ferruginous; the face and vertex covered with brown pubescence; the antennæ reddish-yellow, darkest towards their base, the clypeus and mandibles rufo-testaceous. Thorax thinly clothed in front with red-brown pubescence; the legs dark rufo-testaceous, the anterior and intermediate tarsi paler; wings flavo-hyaline, with bright yellow stains towards their base, and on the anterior margin of the superior pair. Abdomen splendidly iridescent, having purple, violet and blue tints intermixed, changing in different lights; the apex rufo-testaceous, with a few scattered short ferruginous hairs.

Hab. Madagascar. (Coll. F. Smith.)

49. SCOLIA HIRTIPENNIS.

Female. Length 14 lines.—Black; the head dark fusco-ferruginous, the scape of the same colour, the flagellum ferruginous. Thorax strongly and closely punctured on the disk, the metathorax more finely punctured and covered with a sericeous pile; wings fuscous, with a bright purple iridescence; the anterior margins of the superior wings are pale reddish-yellow, which occupies the externo-medial, the marginal and first submarginal

cells, these portions being covered with short ferruginous pubescence. Abdomen: the first segment having a minute tubercle in the centre at its base; the punctures small and scattered on the three basal segments, the basal segment and the basal half of the second covered with pale sericeous pile; the basal and three apical segments dark rufo-testaceous.

Male. Length 13 lines.—Head and thorax dark fusco-ferruginous, the flagellum fulvous; the wings nearly as in the other sex, but having the anterior margins less bright, but similarly pubescent. Abdomen having a splendid purple and green iridescence, closely and moderately punctured; the sides and apex have a fringe of black pubescence.

Hab. Madagascar. (Coll. F. Smith.)

50. SCOLIA SOROR. B.M.

Scolia cyanipennis, *St. Farg. Hym.* iii. 524. 7 (nec *Fabr.*).

Hab. Australia.

51. SCOLIA VERTICALIS. B.M.

Scolia verticalis, *Fabr. Ent. Syst.* ii. 234. 25; *Syst. Piez.* p. 244. 33, and *Cab. Mus. Dom. Banks.*

Hab. New Holland.

52. SCOLIA VIRIDIPENNIS. B.M.

Scolia cyanipennis, *St. Farg. Hym.* iii. 524. 7 (nec *Fabr.*).

Hab. New Holland.

53. SCOLIA MACULATA. B.M.

Scolia maculata, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 255.

Hab. Georgia.

54. SCOLIA ORNATA. B.M.

Scolia maculata, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 255 (nec *Drury*).

Hab. Georgia.

55. SCOLIA AULICA.

Scolia aulica, *Burm. Abh. Nat. Ges. Halle*, i. 33. 48.

Hab. South Carolina.

56. SCOLIA DUBIA. B.M.

Scolia dubia, *Say, Bost. Journ.* i. 364. 2.
Scolia hæmatodes, *Burm. Abh. Nat. Ges. Halle*, i. 33. 49.

Hab. United States; Mexico.

Var. β. The third segment of the abdomen having the oblique yellow spot on each side obsolete.

57. SCOLIA GUTTATA. B.M.

Scolia guttata, *Burm. Abh. Nat. Ges. Halle*, i. 36. 57.

Hab. Mexico.

58. SCOLIA NOBILITATA. B.M.

Scolia nobilitata, *Fabr. Syst. Piez.* p. 244. 32.
St. Farg. Hym. iii. 532. 21.
Burm. Abh. Nat. Ges. Halle, i. 33. 47.
Scolia tricolor, *Klug, Weber & Mohr, Beitr.* i. 35. 29.

Hab. North America; E. Florida (St. John's Bluff).

59. SCOLIA BIFASCIATA. B.M.

Scolia obscura, *Klug, Weber & Mohr, Beitr.* i. 33. 25.
Scolia bicincta, *Fabr. Ent. Syst.* ii. 234. 24; *Syst. Piez.* p. 243. 30 (nec *Rossi*).
Burm. Abh. Nat. Ges. Halle, i. 35. 54.
Sphex radula, *Sulz. Hist. Ins.* t. 27. f. 4.

Hab. North America.

DIV. II.—*The superior wings having two submarginal cells and two recurrent nervures.*

60. SCOLIA ABDOMINALIS. B.M.

Scolia abdominalis, *Spin. Ins. Lig.* fasc. i. 25. 10.
Scolia rubra, *Jurine, Hym.* p. 157. t. 9. f. 12 ♀.
Burm. Abh. Nat. Ges. Halle, i. 27. 31 ♂ ♀.
Scolia rufiventris, *Fisch. d. Waldh. Guér. Mag. Zool.* t. 122.
Tiphia villosa, *Fabr. Syst. Piez.* p. 235. 22 ♂?

Hab. France; Italy; Albania.

61. SCOLIA AUREA. B.M.

Scolia aurea, *Fabr. Ent. Syst.* ii. 231. 13 ♂; *Syst. Piez.* p. 241. 15.
Coqueb. Illus. Icon. Ins. dec. ii. 39. t. 13. f. *a*, *c*, *d*.

Scolia aurea, *Latr. Gen. Cr. et Ins.* iv. 106.
Van. d. Lind. Obs. Foss. Eu. i. 25. 10 ♂ ♀.
Klug, Weber & Mohr, Beitr. i. 31. 22.
Klug, Symb. Phys. dec. iii. t. 27. f. 12.
Colpa aurea, *St. Farg. Hym.* iii. 539. 8.
Lucas, Explo. Sc. Algér. iii. 281. 290.
Scolia ciliata, *Fabr. Ent. Syst.* ii. 231. 12 ♀; *Syst. Piez.* p. 241. 14.
Coqueb. Illus. dec. ii. t. 13. f. 8.

Hab. South Europe; North Africa (Algeria).

62. Scolia Alexandri.

Colpa Alexandri, *St. Farg. Hym.* iii. 543. 11 ♂ (S. 5-cincta var., *Fabr.*?).

Hab. Italy.

63. Scolia rufa.

Colpa rufa, *St. Farg. Hym.* iii. 539. 7.

Hab. Spain.

64. Scolia marginella.

Scolia marginella, *Klug, Weber & Mohr, Beitr.* ii. 214. 44.
Scolia hirtella, *Klug, ibid.* ii. 215. 45.
Scolia plebeja, *Klug, ibid.* ii. 215. 46.

Hab. South of Europe.

65. Scolia facilis.

Female. Length 7 lines.—Black: the head has a thin cinereous pubescence, the vertex impunctate. The thorax smooth and shining on the disk, the punctures large, but scattered, the middle impunctate; the thorax and legs have a long loose cinereous pubescence; the wings subhyaline, having a yellow stain on the anterior margin of the superior wings. Abdomen: the basal segment has an orange band on its apical margin; the second and third segments have a broad transverse band, the second having anteriorly a deep angular emargination; the third has a square incision; none of the bands extend to the lateral margins; the apical margin of the fourth segment has an abbreviated band in the middle; the four basal segments have above and beneath a long fringe of cinereous pubescence; the fifth has a fulvous fringe; the sixth is ferruginous and sprinkled over with short golden hairs, and has on each side an acute spine.

Hab. Canary Islands. (Coll. W. W. Saunders, Esq.)

66. SCOLIA ELEGANS.

Scolia elegans, *Brullé, Hist. Nat. Il. Canar.* ii. pt. 2. *Entom.*

Hab. Canary Islands.

67. SCOLIA RUBRO-MACULATA. B.M.

Female. Length 13 lines.—Black: the face rugose, on each side of the clypeus clothed with cinereous pubescence; the vertex shining, the punctures scattered. Thorax deeply punctured, the disk shining, the punctures scattered; the sides have a scattered ochraceous pubescence, the wings fuscous, darkest towards their anterior margins, and having some irregularly scattered pale spots. Abdomen: the second and third segments have on each side a large subovate brick-red macula, those on the second segment pointed within; those on the third subinterrupted; the three following segments red.

Hab. India.

68. SCOLIA PARVULA.

Colpa parvula, *St. Farg. Hym.* iii. 548. 17 ♀.

Hab. India.

69. SCOLIA EXIMIA. B.M.

Female. Length 11 lines.—Black and shining, the punctures sparing on the vertex. Thorax: the disk, the scutellum and metathorax above having only a few scattered punctures; a large macula on the sides of the prothorax before the insertion of the wings, the post-scutellum and a spot on each side of the metathorax, yellow; the wings dark brown, with a splendid purple iridescence, the pubescence and spines on the legs black. Abdomen: an ovate macula on each side of the first and three following segments, those on the second and third largest.

Hab. India.

70. SCOLIA GROSSA. B.M.

Tiphia grossa, *Fabr. Syst. Piez.* p. 232. 4 ♀.
Scolia grossa, *Burm. Abh. Nat. Ges. Halle,* i. 23. 22 ♂ ♀.

Hab. India.

71. Scolia habrocoma.

Female. Length 14 lines.—Black: the face clothed with short dark brown pubescence, the antennæ ferruginous beneath; the vertex and thorax above covered with large distinct punctures; the sides of the metathorax and also beneath the wings, covered with a short bright golden pile; the prothorax above, covered with short fuscous pubescence; the legs have a similar pubescence above, beneath it is paler; the calcaria pale testaceous; wings flavo-hyaline, the nervures and tegulæ behind, ferruginous. Abdomen having above a bright green and violet iridescence; the pubescence on the basal segment fuscous; the sides and margins of the apical segments fringed with black pubescence.

Hab. India. (Coll. W. W. Saunders, Esq.)

72. Scolia annulata. B.M.

Tiphia annulata, *Fabr. Ent. Syst.* ii. 225. 7 ♀; *Syst. Piez.* 234. 11.
Tiphia 4-fasciata, *Fabr. Ent. Syst. Supp.* p. 255. 16 ♂; *Syst. Piez.* 242. 20.
Scolia 4-fasciata, *Burm. Abh. Nat. Ges. Halle*, i. 25. 27.
Campsomeris Servillii, *St. Farg. Hym.* iii. 501. 9 (nec *Guér.*).

Hab. Java; China.

73. Scolia 4-guttulata.

Scolia 4-guttulata, *Burm. Abh. Nat. Ges. Halle*, i. 21. 17 ♀.

Hab. Java.

74. Scolia fimbriata. B.M.

Scolia thoracica, *Klug, Weber & Mohr, Beitr.* i. 33. 24 ♀ (nec *Fabr.*).
Campsomeris collaris, *St. Farg. Hym.* iii. 498. 5 (nec *Fabr.*).
Scolia fimbriata, *Burm. Abh. Nat. Ges. Halle*, i. 25. 26.

Hab. Java.

75. Scolia Iris. B.M.

Scolia 4-fasciata, *Klug, Weber & Mohr, Beitr.* i. 30. 20 ♂ (nec *Fabr.*).
Scolia radula, *Klug, Weber & Mohr, Beitr.* i. 30. 20 ♀ (nec *Fabr.*).
Colpa Iris, *St. Farg. Hym.* iii. 547. 16 ♂.
Campsomeris Lindenii, *St. Farg. Hym.* iii. 500. 8 ♀.
Scolia Iris, *Burm. Abh. Nat. Ges. Halle*, i. 26. 28.

Hab. Java; Sumatra; East Indies; China (Hong Kong; Shanghai).

76. Scolia Javana.

Campsomeris Javana, *St. Farg. Hym.* iii. 498. 4 ♀.

Hab. Java; Sumatra.

77. Scolia ignita. B.M.

Female. Length 1 inch 4 lines.—Black: the head smooth and shining, the face punctured below the emargination of the eyes, and covered with short erect black hairs. Thorax thinly clothed in front with short erect pubescence; the wings brown, with a rich purple iridescence; the legs have a dense rigid black pubescence; the spines which arm the apex of the posterior tibiæ ferruginous at their apex, the inner one dilated. Abdomen smooth, shining and impunctate; the extreme base and the second and third segments have a few scattered punctures; a band of red pubescence occupies the apical margin of the second and the basal margin of the third segment; the third has also a similar broad band on its apical margin; the three apical segments covered with red pubescence, except the third in the middle at its base.

Hab. Silhet; North Bengal; Travan.

This species was omitted by accident in the First Division, to which it belongs.

78. Scolia luctuosa. B.M.

Female. Length 1 inch 3 lines.—Black: the sides of the face and the base of the mandibles have a short cinereous pubescence, the face strongly punctured, the vertex having scattered punctures. Thorax strongly punctured, the wings dark fuscous, with a purple iridescence. Abdomen: the second and third segments have a small yellow macula at their lateral margins; the four basal segments have a few scattered punctures at their base and a transverse row near their apical margins; the apical margins ciliated with black hairs.

Hab. Silhet.

79. Scolia aureicollis. B.M.

Campsomeris aureicollis, *St. Farg. Hym.* iii. 499. 6 ♀.

After an examination of a number of specimens of this species, which has the margin of the vertex and the prothorax covered with rich fulvous pubescence, which at once distinguishes it from *S. collaris*, it cannot be considered as a mere variety of the latter species; *S. collaris* has the disk of the thorax, scutellum,

post-scutellum, and metathorax closely and strongly punctured; *S. aureicollis* has the metathorax impunctate.

Hab. Silhet; Ceylon; Philippine Islands.

80. Scolia aurulenta. B.M.

Female. Length 9 lines.—Black: the head and thorax above clothed with rich fulvous pubescence, the mandibles rufo-piceous, fringed with fulvous hairs; the wings fulvo-hyaline, the tarsi ferruginous, the pubescence and cilia of the legs of a rich fulvo-ferruginous, the spines which arm the apex of the tibiæ rufo-testaceous. Abdomen: the apical margin of the first and three following segments of a reddish-yellow; the fasciæ on the second and third segments slightly emarginate and widest in the middle, all the segments fringed with bright fulvo-ferruginous hairs; beneath smooth and shining, having a few scattered punctures, and the margins fringed with fulvous hairs.

Hab. Philippine Islands.

81. Scolia prismatica. B.M.

Female. Length 9 lines.—Black: the head and thorax above anteriorly clothed with pale fulvous pubescence; the thorax covered with strong punctures, the middle of the disk impunctate; the tegulæ pale testaceous, the wings fulvo-hyaline, the nervures ferruginous; the legs have a glittering fulvo-ferruginous pubescence, the calcaria and spines which arm the tibiæ and joints of the tarsi rufo-testaceous; the apical joints of the tarsi dark rufo-piceous. Abdomen smooth and shining, having a splendid prismatic iridescence, the basal segment and the apical margins of the second and two following segments fringed with glittering pale fulvous hairs; the margin of the fifth segment and the sixth entirely covered with black pubescence.

Hab. Shanghai.

82. Scolia subobscura.

Colpa infuscata, *St. Farg. Hym.* iii. 537. 4 ♀.
Scolia infuscata, *Burm. Abh. Nat. Ges. Halle*, i. 23. 23.

Hab. Surinam.

83. Scolia fusca.

Scolia fusca, *St. Farg. Hym.* iii. 527. 15 ♀.

Hab. Persia.

84. Scolia aureola. B.M.

Scolia aureola, *Klug, Symb. Phys.* dec. iii. t. 27. f. 11.

Hab. Egypt; Port Natal.

85. Scolia Arabica.

Scolia Arabica. *St. Farg. Hym.* iii. 526. 12.

Hab. Arabia.

86. Scolia fasciatella. B.M.

Scolia fasciatella, *Klug, Symb. Phys.* dec. iii. t. 27. f. 8 ♂.
Burm. Abh. Nat. Ges. Halle, i. 25. 26.
Scolia antennata, *Klug, Symb. Phys.* dec. iii. t. 27. f. 10 ♂, var.?
Scolia hyalina, *Klug, Symb. Phys.* dec. iii. t. 27. f. 9 ♀.

Hab. Nubia (Dongola).

87. Scolia discolor.

Scolia discolor, *Klug, Symb. Phys.* dec. iii. t. 27. f. 7.

Hab. Nubia (Dongola).

88. Scolia collaris.

Tiphia collaris, *Fabr. Ent. Syst.* ii. 227. 16 ♀; *Syst. Piez.* p. 235. 20.
Scolia eriophora, *Klug, Symb. Phys.* dec. iii. t. 27. f. 5 ♂.
Scolia vestita, *Klug, Symb. Phys.* dec. iii. t. 27. f. 5 ♀.
Scolia hirticollis, *Fabr. Syst. Piez.* p. 243. 25?

Hab. Africa.

89. Scolia fasciatopennis.

Female. Length 7 lines. — Black: the vertex smooth and shining; thorax strongly punctured, the wings being rather more than half anteriorly of a dark brown with a bright violet iridescence, hyaline posteriorly.

The male closely resembles the female, and is entirely black, with pale margins to the wings.

Hab. West Africa. (Coll. F. Smith.)

This species closely approaches the *S. apicalis* of Guérin, but that insect has yellow antennæ.

90. SCOLIA FENESTRATA. B.M.

Female. Length 9–10 lines.—Black: the head smooth and shining, the face punctured and having a short black pubescence, the clypeus shining, impunctate. Thorax coarsely punctured, the punctures on the disk elongate; wings hyaline, with a dark fuscous cloud beyond the enclosed cells, which passes obliquely across the apex of the inferior wings; the spines and pubescence of the legs black. Abdomen having a beautiful sericeous reflection, with a metallic brilliancy in certain lights; beneath smooth and shining; the second and two following segments have each a transverse line of punctures.

Hab. Congo; Gambia.

91. SCOLIA SENILIS. B.M.

Elis senilis, *Fabr. Ent. Syst.* ii. 237. 35 ♂; *Syst. Piez.* p. 249. 3.
Scolia senilis, *Klug, Weber & Mohr, Beitr.* i. 29. 17.
Burm. Abh. Nat. Ges. Halle, i. 24. 24.
Colpa senilis, *St. Farg. Hym.* iii. 537. 5.
Lucas, Explo. Sc. Algér. iii. 282. 292.
Tiphia thoracica, *Fabr. Ent. Syst. Supp.* p. 254. 15 ♀; *Syst. Piez.* p. 235. 20.
Scolia collaris, *Weber & Mohr, Beitr.* i. 32. 24.
Campsomeris collaris, *Lucas, Explo. Sc. Algér.* iii. 278. 281.
Scolia thoracica, *Guér. Voy. Coquille,* ii. pt. 2. 251.

Hab. Barbary; Malabar; Sierra Leone; South Africa (Gambia).

92. SCOLIA 5-FASCIATA. B.M.

Scolia 5-fasciata, *Fabr. Ent. Syst.* ii. 233. 22 ♂; *Syst. Piez.* p. 243. 28, *& Cab. Mus. Dom. Banks.*

Hab. Africa.

93. SCOLIA UNDULATA.

Female. Length 9 lines.—Black: the antennæ, anterior margin of the clypeus and the mandibles ferruginous, the latter fuscous at their tips; the face has a rich golden pubescence. Thorax clothed anteriorly with bright rufo-fulvous pubescence, that on the sides and on the metathorax is golden; wings fulvo-hyaline, the anterior margin of the superior wings having a ferruginous stain, the nervures and tegulæ ferruginous; the anterior margin of the superior wings fuscous towards the apex; the legs bright ferruginous. Abdomen: the apical margins of the first, second and third segments have a yellow marginal fascia, that on the first emarginate in the middle, the second waved anteriorly, the

third emarginate, the fifth and sixth segments rufo-testaceous, and clothed with ferruginous pubescence; beneath, the margins of the second and third segments yellow, the margins ciliated with ferruginous pubescence.

Hab. Africa. (Coll. F. Smith.)

94. SCOLIA SIGNATA. B.M.

Female. Length 10 lines.—Black: the face, thorax above and the legs have an ochraceous pubescence; the wings fusco-hyaline, the nervures rufo-piceous. Abdomen: the three basal segments yellow above; the extreme base, and the basal margins of the second and third segments black, the black fasciæ on the two latter recurved laterally; the three apical margins black.

Hab. South Africa (Gambia).

95. SCOLIA 7-CINCTA. B.M.

Scolia 7-cincta, *Fabr. Syst. Piez.* 249. 4 ♂.

Male. Length 7–8 lines.—Black: the outer orbits of the eyes, the clypeus and mandibles pale yellow; the tips of the latter rufo-piceous, and a minute black dot in the centre of the clypeus; a narrow yellow line at the inner orbits of the eyes, not entering their emargination. Thorax: the collar, a spot on the tubercles, the tegulæ in front, the scutellum and post-scutellum yellow; the anterior coxæ in front, the femora beneath, the tibiæ in front, and the basal joints of the anterior and intermediate tarsi, pale yellow; the calcaria pale testaceous; the wings subhyaline, the nervures ferruginous. Abdomen having a violet iridescence, the margins of the segments have a yellow fascia, the three first broadest, the second emarginate in the middle, the third emarginate on each side; sometimes the sixth has a very narrow yellow margin; the seventh immaculate.

This species closely resembles the 5-*fasciata* of Fabricius, but the bands on the abdomen are narrower, and the pubescence is more sparing; it is the true *Elis 7-cincta* of the *Systema Piezatorum*, as appears from an examination of the typical specimen in the Banksian cabinet; the above description will serve for its more ready determination.

Hab. Australia (Port Essington, &c.).

96. SCOLIA RADULA. B.M.

Tiphia radula, *Fabr. Ent. Syst.* ii. 226. 11; *Syst. Piez.* p. 235. 15, & *Cab. Mus. Dom. Banks.*

Hab. Australia.

97. Scolia atrata. B.M.

Scolia atrata, *Fabr. Ent. Syst.* ii. 228. 1 ♂ ♀; *Syst. Piez.* p. 239. 2.
Burm. Abh. Nat. Ges. Halle, i. 23. 23.
Colpa atrata, *St. Farg. Hym.* iii. 535. 2.
Scolia micans, *Guér. Voy. Coq. Zool.* ii. pt. 2. 251.
Palisot de Beauv. Ins. Afric. et Amér. p. 258. t. 10. f. 3 ♀.

Hab. St. Domingo; Cuba; Jamaica.

98. Scolia dorsata. B.M.

Tiphia dorsata, *Fabr. Ent. Syst.* ii. 226. 12; *Syst. Piez.* p. 235. 16.
Scolia dorsata, *Klug, Weber & Mohr, Beitr.* ii. 212. 40.
Scolia hæmatogastra, *Perty, Del. An. Art.* p. 139. t. 27. f. 14 ♀.
Schomb. Faun. & Flora Brit. Guiana, iii. 589.
Colpa rubida, *St. Farg. Hym.* iii. 544. 12.

Hab. Brazil.

99. Scolia Hoffmannseggii.

Scolia Hoffmannseggii, *Klug, Weber & Mohr, Beitr.* i. 37. 36 ♂.
Burm. Abh. Nat. Ges. Halle, i. 29. 37.
Scolia fuscata, *Klug, Weber & Mohr, Beitr.* ii. 213. 42.
Colpa bistrimacula, *St. Farg. Hym.* iii. 546. 14.

Hab. Brazil (St. Paul).

100. Scolia hyalina. B.M.

Campsomeris hyalina, *St. Farg. Hym.* iii. 497. 1 ♀.
Burm. Abh. Nat. Ges. Halle, i. 23. 21.

Hab. Brazil; Surinam.

101. Scolia conformis.

Scolia conformis, *Spin. Mem. Accad. Torino*, xiii. 61. 44.

Hab. Para.

102. Scolia hexaspilota.

Scolia hexaspilota, *Spin. Mem. Accad. Torino*, xiii. 60. 43.

Hab. Para.

103. Scolia campestris.

Scolia campestris, *Burm. Abh. Nat. Ges. Halle*, i. 29. 36 ♂ ♀.

Hab. Brazil.

104. SCOLIA COSTALIS. B.M.

Campsomeris costalis, *St. Farg. Hym.* iii. 497. 2 ♀.

Hab. Brazil.

105. SCOLIA IRREGULARIS. B.M.

Female. Length 11–12 lines.—Black: strongly punctured, the vertex and disk of the thorax having the punctures scattered; the wings fuscous, the anterior margin of the superior wings darkest, and varied by irregularly scattered subhyaline spots; the metathorax has a sericeous pile, the legs have their spines and pubescence black. Abdomen slightly sericeous, the basal segment having two transverse subquadrate yellow maculæ; the second segment has two subquadrate maculæ placed laterally, and the third an ovate spot on each side.

Var. β. The spots on the basal segment reduced to minute ovate spots; the maculæ on the two following segments reduced to half their usual size.

Male.—Resembles the female, but has the collar yellow, continued to the insertion of the wings; a minute dot on the tegulæ, and the scutellum and post-scutellum yellow. The basal segment of the abdomen has a transverse subinterrupted line, widest towards the lateral margins; and the second and third segments a similar line at their apical margins; the apex armed with three acute spines.

Hab. Brazil.

106. SCOLIA CONSPICUA. B.M.

Female. Length 8½ lines. — Black and shining, the face closely and deeply punctured, the vertex impunctate, its margin fringed with black hairs. Thorax: the prothorax deeply punctured, the mesothorax having a few scattered large punctures; the scutellum and post-scutellum sulphur-yellow and impunctate, as well as the metathorax in the centre at its base; the wings subhyaline; a black stripe, commencing near the apex of the externo-medial cell, occupies the first submarginal and marginal cells, terminating a little before the apex of the wings. Abdomen: the basal segment sulphur-yellow above, its margins and extreme base black, the second segment having two large subovate maculæ which occupy nearly the entire segment above. The legs have the spines black, and a scattered white pubescence intermixed; at the base of the abdomen are a few scattered white hairs, the sides and apical segments fringed with black pubescence.

Hab. Brazil (Para). (H. W. Bates.)

107. Scolia variegata. B.M.

Scolia variegata, *Fabr. Ent. Syst.* ii. 230. 10 ♂; *Syst. Piez.* p. 241. 12.
Klug, Weber & Mohr, Beitr. i. 28. 16.
St. Farg. Hym. iii. 544. 13.
Schomb. Faun. & Flor. Brit. Guiana, iii. 589.
Colpa variegata, *St. Farg. Hym.* iii. 544. 13.

Hab. Brazil (Rio Janeiro).

108. Scolia peregrina. B.M.

Colpa peregrina, *St. Farg. Hym.* iii. 534. 1 ♀.
Scolia atrata, *Klug, Weber & Mohr, Beitr.* i. 21. 1.
Scolia peregrina, *Burm. Abh. Nat. Ges. Halle*, i. 22. 19.

Hab. Brazil.

109. Scolia trifasciata.

Tiphia trifasciata, *Fabr. Ent. Syst.* ii. 246. 14 ♂; *Syst. Piez.* p. 235. 17.
Scolia trifasciata, *Klug, Weber & Mohr, Beitr.* i. 32. 23.

Hab. Brazil.

110. Scolia Servillei.

Scolia Servillei, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 250.

Hab. Peru (Lima).

111. Scolia Wesmaeli.

Colpa Wesmaeli, *St. Farg. Hym.* 536. 3 ♀.

Hab. Brazil.

112. Scolia vitripennis.

Male. Length 9½ lines.—Black: the pubescence entirely black, the head and thorax strongly and closely punctured, subopake; the basal half of the wings clear hyaline, the apical half deep brown with a purple iridescence. Abdomen blue-black, very pubescent towards the apex and at the sides; the second and third segments have on their apical margins, on each side, a short narrow slightly curved yellow line; above, the abdomen is closely and strongly punctured; beneath, shining, the punctures large but scattered.

Hab. Brazil (Amazons). (Coll. W. W. Saunders, Esq.)

113. SCOLIA LIMOSA. B.M.

Scolia limosa, *Burm. Abh. Nat. Ges. Halle*, i. 28. 34.

Hab. Mexico.

114. SCOLIA PLUMIPES. B.M.

Sphex plumipes, *Drury, Exot. Ins.* i. t. 44. f. 5 ♀.
Scolia radula, *Fabr. Ent. Syst.* ii. 232. 16 ♂; *Syst. Piez.* p. 242. 19.
Burm. Abh. Nat. Ges. Halle, i. 28. 33 ♂ ♀.
Scolia fossulana, *Fabr. Syst. Piez.* p. 242. 18 ♀.
Colpa fossulana, *St. Farg. Hym.* iii. 540. 9.
Scolia confluenta, *Say, Bost. Journ.* i. 364. 3.

Hab. North America; East Florida (St. John's Bluff).

115. SCOLIA PETITII. B.M.

Scolia Petitii, *Guér. Voy. Coq. Zool.* ii. pt. 2. 249.
Burm. Abh. Nat. Ges. Halle, i. 21. 14.
Scolia ephippium, *Say, Bost. Journ.* i. 363. 1.

Hab. Mexico.

116. SCOLIA UNDATA.

Scolia undata, *Klug, Weber & Mohr, Beitr.* ii. 212. 41 ♂.
Scolia Abbotii, *Klug, Weber & Mohr, Beitr.* ii. 213. 43.
Colpa Pennsylvanica, *St. Farg. Hym.* iii. 546. 15.

Hab. North America.

117. SCOLIA 4-MACULATA. B.M.

Vespa maculata, *Drury, Exot. Ins.* ii. t. 39. f. 2 ♀.
Scolia 4-maculata, *Fabr. Ent. Syst.* ii. 229. 4; *Syst. Piez.* p. 240. 5.
Campsomeris 4-notata, *St. Farg. Hym.* iii. 502. 10.
Scolia 4-notata, *Fabr. Syst. Piez.* p. 240. 6 ♂.

Hab. Carolina; Pennsylvania; East Florida (St. John's Bluff).

Div. III.—*The superior wings having three submarginal cells and one recurrent nervure.*

118. Scolia hortorum. B.M.

Scolia hortorum, *Fabr. Ent. Syst.* ii. 232. 18 ♂; *Syst. Piez.* p. 243. 24.
Klug, Weber & Mohr, Beitr. i. 22. 4.
Latr. Gen. Crust. et Ins. iv. 105.
Spin. Ins. Lig. fasc. i. 76. 8.
Van d. Lind. Hym. Europ. 16. 1.
St. Farg. Hym. iii. 520. 1.
Lucas, Explo. Sc. Algér. iii. 278. t. 15. 4.
Scolia flavifrons, *Fabr. Ent. Syst.* ii. 229. 5; *Syst. Piez.* p. 240. 7 ♀.
Klug, Weber & Mohr, Beitr. i. 25. 5.
Spin. Ins. Lig. fasc. i. 74. 1.

Hab. Europe.

119. Scolia hæmorrhoidalis. B.M.

Sphex maculata, *Drury, Illus. Exot. Ins.* ii. t. 40. f. 3?
Scolia hæmorrhoidalis, *Fabr. Ent. Syst.* ii. 229. 7 ♂; *Syst. Piez.* p. 240. 9.
Klug, Weber & Mohr, Beitr. i. 24. 6.
Latr. Gen. Cr. et Ins. iv. 105.
Van d. Lind. Hym. Europ. p. 18. 3.
Brullé, Expéd. Sc. de Morée, iii. 370. 815.
St. Farg. Hym. iii. 522. 5.
Scolia erythrocephala, *Burm. Abh. Nat. Ges. Halle,* i. 18. 7 ♀ (nec *Fabr.*).

Hab. France; Spain; Albania; Morea.

120. Scolia nudata. B.M.

Female. Length 6 lines.—Black; head and thorax strongly, but not very closely, punctured; the wings dark fuscous, with a brilliant purple iridescence. Abdomen shining, distantly and rather finely punctured, with a faint metallic-blue reflection in certain lights.

Hab. North Bengal.

121. Scolia patricialis. B.M.

Scolia patricialis, *Burm. Abh. Nat. Ges. Halle,* i. 19. 10.

Hab. Malabar; Sumatra (Pedang).

122. SCOLIA PROCERA. B.M.

Scolia procera, *Illig. Mag.* i. 196. 26 ♀.
Fabr. Syst. Piez. p. 238. 1.
St. Farg. Hym. iii. 519. 3.
Scolia capitata, *Syst. Piez.* p. 239. 3 ♂.

Hab. Java.

123. SCOLIA RUBIGINOSA. B.M.

Scolia rubiginosa, *Fabr. Ent. Syst.* ii. 230. 8; *Syst. Piez.* p. 241. 10.
Klug, Weber & Mohr, Beitr. ii. 211. 38.
St. Farg. Hym. iii. 518. 2.
Scolia ornata, *St. Farg. Hym.* iii. 517. 1, var. ♀.

Hab. Java.

124. SCOLIA BIDENS. B.M.

Sphex bidens, *Linn. Syst. Nat.* i. 943. 14.
Scolia bimaculata, *Fabr. Ent. Syst.* ii. 231. 11; *Syst. Piez.* p. 241. 13.
Rossi, Faun. Etrus. Mant. t. 8. f. 6.
Klug, Weber & Mohr, Beitr. i. 24. 7.
Latr. Gen. Crust. et Ins. iv. 105.
Van d. Lind. Hym. Europ. p. 17. 2.
Scolia bidens, *St. Farg. Hym.* iii. 523. 6.
Lucas, Explo. Sc. Algér. iii. 278. 283.

Hab. Spain; Sicily; N. Africa (Algeria).

125. SCOLIA CASTANEA.

Scolia castanea, *Perch. Gen. des Ins. Guér. & Perch. Hym.* t. 1. f. 1 ♀.

Hab. Senegal.

126. SCOLIA RUFICEPS. B.M.

Female. Length 8¼ lines.—Head and antennæ of a brick-red; the thorax and legs black, the former coarsely punctured; wings dark fuscous, and having a bright coppery effulgence, dashed with purple in certain lights. Abdomen chalybeous, strongly punctured at the base, more delicately and widely on the second and following segments, the apical segment angular at the apex and concave above, the margins of the third and following segments fringed with black pubescence.

Male.—Resembles the other sex, differing in having the antennæ longer than the thorax, but otherwise agreeing in every respect.

Hab. Philippine Islands.

127. Scolia Urvillii.

Scolia Urvillii, *St. Farg. Hym.* iii. 503. 12.

Hab. The Moluccas.

128. Scolia coronata. B.M.

Female. Length 10-12 lines.—Black: the vertex having a broad yellow stripe, which has a notch behind each of the posterior stemmata; the vertex and disk of the thorax smooth, shining, and impunctate; the scutellum and anterior margin of the mesothorax having large scattered punctures; the metathorax closely punctured, subopake, and having a little black pubescence on the sides; wings deep fuscous, with a brilliant purple iridescence. Abdomen shining, and having some scattered punctures with a sparing black pubescence, the third segment having on each side an ovate bright yellow macula.

Hab. Australia (Adelaide).

129. Scolia Chiliensis.

Scolia Chiliensis, *Guér. Voy. Coq. Zool.* ii. pt. 2. 249.

Hab. Chili.

130. Scolia ardens.

Scolia fervida, *Burm. Abh. Nat. Ges. Halle,* i. 20. 12, nec *Smith.*

Hab. Mexico.

Div. IV.—*The superior wings having three submarginal cells and two recurrent nervures.*

131. Scolia canescens. B.M.

Sphex canescens, *Scop. Faun. Ins.* i. 2. 66. t. 22. f. 8 ♂.
Scolia interrupta, *Rossi, Faun. Etrus.* ii. 72. 838 ♂.
Fabr. Ent. Syst. ii. 236. 34.
Klug, Weber & Mohr, Beitr. i. 29. 18.
Panz. Faun. Germ. 62. 14.
Latr. Gen. Crust. et Ins. iv. 105.
Van de Lind. Hym. Europ. p. 21. 5.

Scolia 6-maculata, *Fabr. Ent. Syst.* ii. 229. 6; *Syst. Piez.* p. 240. 8.
Rossi, Faun. Etrus. ii. 71. 835.
Klug, Weber & Mohr, Beitr. i. 25. 10.
Latr. Gen. Crust. et Ins. iv. 106.
Van de Lind. Hym. Europ. p. 22. 6.
Elis interrupta, *Fabr. Syst. Piez.* p. 249. 2.
Colpa interrupta, *St. Farg. Hym.* iii. 550. 19.
Lucas, Explo. Sc. Algér. iii. 282. 291.
Colpa sex-maculata, *St. Farg. Hym.* iii. 552. 20.
Lucas, Explo. Sc. Algér. iii. 282. 293.
Sphex insubrica, *Scop. Del. Faun. et Flo. Insub.* 58. 22. f. 1?

Hab. Italy; Sicily.

132. SCOLIA 5-CINCTA. B.M.

Scolia 5-cincta, *Fabr. Ent. Syst.* ii. 234. 23 ♂; *Syst. Piez.* p. 243. 29.
Burm. Abh. Nat. Ges. Halle, i. 17. 5.
Scolia marginata, *Van de Lind. Hym. Europ.* 23. 8.
Myzine arcuata, *Fisch. de Waldh. Guér. Mag. Zool.* (1833) p. 122.

Hab. Italy; Hungary; Albania.

133. SCOLIA LITIGIOSA. B.M.

Female. Length 9 lines.—Black: head orange-red, the anterior margin of the clypeus, the mandibles and antennæ black. Thorax: the anterior angles red, the wings dark fuscous, palest at their posterior margins, having a metallic green iridescence. Abdomen: the third and fourth segments above red; the third segment has a narrow black line down the middle, and the fourth an abbreviated transverse line in the middle, towards the apical margin.

Hab. India.

134. SCOLIA ERYTHROSOMA.

Scolia erythrosoma, *Burm. Abh. Nat. Ges. Halle,* i. 15. 1.

Hab. Sumatra.

135. SCOLIA ALIENA.

Scolia aliena, *Klug, Symb. Phys.* dec. iii. t. 27. f. 3.

Hab. Arabia Felix. (Coll. W. W. Saunders, Esq.)

136. SCOLIA NIGRITA. B.M.

Scolia nigrita, *Fabr. Ent. Syst.* ii. 229. 3 ♀ ; *Syst. Piez.* p. 240. 4, *& Cab. Mus. Dom. Banks.*
Guér. Voy. Abyss. vi. 353.

Female. Length 8–10½ lines.—Black: strongly punctured, the vertex and disk of the thorax smooth and shining; wings clear hyaline, the anterior margin of the superior wings having a black stripe, extending from the base to the apex, a narrower stripe on the inferior margin of the superior wings, and slightly extending over the anterior margin of the posterior pair, runs from the base of the wings to the apex of the anal cell; the black stripes have a brilliant purple iridescence. Abdomen shining, strongly punctured at the sides, base, and apex, more finely and distantly in the middle; the sides and apical segments fringed with black pubescence.

Hab. Port Natal; Abyssinia.

Note.—The neuration of the wings in this species is very inconstant: of four specimens received from Port Natal, one has the neuration of the first division; the other three have three discoidal cells, but the second recurrent nervure unites with the first, and is received by the second submarginal cell; this species would therefore fall into Guérin's subgenus *Liacos*.

The typical specimen in the Banksian Cabinet having been carefully examined, it appeared necessary to give the above detailed description, that of Fabricius in the *Entomologia Systematica* being too general to answer the purpose of correct discrimination.

137. SCOLIA CAPITATA.

Scolia capitata, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 248.

Hab. Senegal.

138. SCOLIA DIMIDIATA. B.M.

Scolia dimidiata, *Guér. Voy. Coq. Zool.* ii. pt. 2. 247 ♂.
Burm. Abh. Nat. Ges. Halle, i. 15. 2.

In this species the two recurrent nervures unite, and are received in a single nerve by the second submarginal cell.

Hab. The Moluccas; Isle of Bourou.

139. SCOLIA FERRUGINEA. B.M.

Scolia ferruginea, *Fabr. Ent. Syst.* ii. 231. 14; *Syst. Piez.* p. 241. 16, *& Mus. Dom. Banks.*

Hab. New Holland.

140. SCOLIA ANTHRACINA. B.M.

Scolia anthracina, *Burm. Abh. Nat. Ges. Halle*, i. 16. 3.

Hab. New Holland (King George's Sound).

141. SCOLIA FORMOSA.

Scolia formosa, *Guér. Icon. Règ. Anim.* t. 69. f. 10; *Voy. Coq. Zool.* ii. pt. 2. p. 252.

Hab. New Holland; New Ireland (Port Praslin).

142. SCOLIA FULVA. B.M.

Scolia fulva, *Gray, Cuv. Anim. Kingd.* (*Griff.*) 516. t. 71. f. 1.

Hab. New Holland.

143. SCOLIA BIMACULATA. B.M.

Female. Length 10 lines.—Black: a transverse yellow stripe on the vertex; the wings dark fuscous, and having a bright violet iridescence; the disk of the thorax smooth, impunctate; a few scattered punctures at the sides, but the metathorax closely punctured; in more recent specimens the thorax has probably some pale pubescence on the sides and metathorax. Abdomen smooth and shining, the punctures deep but widely scattered; the third segment has on each side a large ovate yellow spot.

Hab. New Holland (Port Stephen).

144. SCOLIA FLAVIDULA. B.M.

Female. Length 9 lines.—Black: the head shining, with deep scattered punctures; two short lines behind the eyes, another in front of the anterior stemma, and a line on each side of the face, entering the emargination of the eyes, yellow; the mandibles and antennæ dark rufo-piceous. Thorax thinly clothed above with yellow pubescence; the scutellum and post-scutellum yellow; the tegulæ yellow; wings flavo-hyaline, the anterior margins of the superior wings deep yellow; the tarsi dark rufo-piceous, ciliated with bright ferruginous hairs, which are also thinly scattered on the tibiæ, the spines at the apex of the latter pale rufo-testaceous. Abdomen bright yellow; the extreme base and the apical margins of the second and third segments black, covered with a long thin fulvous pubescence; beneath black and shining, the apical margins of the segments ciliated with white pubescence, that on the apical segment bright golden-yellow.

Hab. Australia.

145. SCOLIA ZONATA. B.M.

Female. Length 13–14 lines.—Black: the antennæ, margin of the clypeus and the mandibles ferruginous; the scape fuscous above; the face covered with ochraceous pubescence; the vertex smooth and shining, its posterior margin punctured, and fringed with ochraceous pubescence. Thorax: the hinder margins of the prothorax and of the tegulæ, the tibiæ and tarsi, ferruginous; the inner spurs which arm the apex of the posterior tibiæ as long as the basal joint of the tarsus, very slender and acute at their apex; wings flavo-hyaline, slightly clouded at their apex, and of a reddish-yellow at the anterior margins of the superior wings; the nervures ferruginous; the prothorax, metathorax and legs are thinly clothed with ochraceous pubescence. Abdomen: the second, third and fourth segments have a broad yellow fascia at their basal margins, the two latter continuous beneath, the three apical segments entirely yellow; the base has a thin ochraceous pubescence, that on the apical segments ferruginous.

The male closely resembles the female, the flagellum being ferruginous, the clypeus yellow, and having in the centre an angular black spot; the four apical segments of the abdomen entirely yellow.

Hab. New Holland.

Genus 12. POLOCHRUM.

Polochrum, *Spin. Ins. Lig.* i. 20 (1805).

1. POLOCHRUM REPANDUM.

Polochrum repandum, *Spin. Ins. Lig.* i. 20. t. 2. f. 8 *a* ♀, *b* ♂.
Latr. Gen. Crust. et Ins. iv. 109.
St. Farg. & Serv. Ency. Méth. x. 174.
Van d. Lind. Obs. Hym. Eur. p. 302. 1.
St. Farg. Hym. iii. 566. 1.

Hab. Geneva; Bologna; Piedmont.

Genus 13. SAPYGA.

Apis, pt., *Linn. Syst. Nat.* i. 953 (1766).
Scolia, pt., *Fabr. Syst. Ent.* p. 355 (1775).
Sirex, pt., *Fabr. Mant.* i. 257 (1787).
Sapyga, *Latr. Précis*, p. 134 (1769).
Masaris, *Panz. Faun. Germ.* fasc. 47 (1801).
Hellus, pt., *Fabr. Syst. Piez.* p. 246 (1804).

1. SAPYGA CLAVICORNIS. B.M.

Apis clavicornis, *Linn. Syst. Nat.* i. 953. 3, and *Cab. Mus. Linn. Soc.* ♂ type.
Scolia prisma, *Fabr. Mant.* i. 282. 21; *Ent. Syst.* ii. 236. 31.
Sphex prisma, *Vill. Ent.* iii. 244. 66 ♀.
Masaris Crabroniformis, *Panz. Faun. Germ.* 47. 22 ♀.
Hellus prisma, *Fabr. Syst. Piez.* p. 247. 5.
Sapyga prisma, *Klug, Mon. Siric. Germ.* p. 63. t. 7. f. 7 ♀, 8 ♂.
Latr. Hist. Nat. xiii. 273. 2.
Van d. Lind. Obs. Hym. Eur. 303. 2.
Wesm. Hym. Foss. Belg. 25. 2.
Sapyga clavicornis, *Curtis, Brit. Ent.* xi. t. 532 ♂ ♀.
Shuck. Foss. Hym. p. 45. 2.
Nyland. Ap. Boreal. p. 27. 2.

Hab. Britain; France; Germany.

2. SAPYGA PUNCTATA. B.M.

Scolia quinquepunctata, *Fabr. Spec. Ins.* i. 453. 14 ♀; *Ent. Syst.* ii. 235. 27.
Scolia quadriguttata, *Fabr. Spec. Ins.* i. 454. 15 ♂; *Ent. Syst.* ii. 235. 29.
Sirex pacca, *Fabr. Mant.* i. 258. 15 ♀.
Sapyga punctata, *Klug, Mon. Siric. Germ.* 61. t. 7. f. 4 ♀, 5 & 6 ♂.
Panz. Faun. Germ. 100. 17 ♂.
Spin. Ins. Lig. i. 76. 1.
Latr. Hist. Nat. xiii. 272.
Van d. Lind. Obs. Hym. Eur. 302. 1.
Shuck. Foss. Hym. p. 44. 1.
Nyland. Ap. Boreal. 25. 1.
Wesm. Hym. Foss. Belg. p. 25. 1.
Hellus sexpunctatus, quadripunctatus et pacca, *Fabr. Syst. Piez.* p. 274.
Sapyga quadripunctata, *Panz. Faun. Germ.* 87. 20 ♂.
Sapyga decemguttata, *Jurine, Hym.* 160. t. 9. f. 13 ♂.
Sapyga sexpunctata, *Latr. Nouv. Dict.* ed. 2. p. 30. 179.
Sapyga varia, *St. Farg. & Serv. Ency. Méth.* x. 338. 1.
Guér. Icon. Règ. Anim. Ins. p. 432. t. 69. f. 11 ♀.

Hab. Europe.

3. SAPYGA MARTINI. B.M.

Female. Length 5 lines.—Black: head and thorax coarsely punctured, most finely so on the metathorax behind; the flagellum having four or five of the basal joints fulvous beneath; a minute spot behind the eyes, a line within their inner orbit below

their emargination, and a lunule at the base of the clypeus, pale yellow. Thorax: a spot on each side of the collar, and the tibiæ above, yellow; the tarsi fulvo-testaceous, more or less fuscous above; the wings faintly coloured and iridescent. Abdomen: the third segment has on each side a transverse yellow stripe, frequently uniting; the fourth an elongate stripe, pointed within; the sixth segment has a large ovate macula, occupying the greater portion of it; beneath, the third and fourth segments have an interrupted fascia in the middle.

Male.—Very closely resembling the other sex, but having a yellow spot on each side of the metathorax; and the tibiæ more yellow, having merely a fulvous stain behind; the yellow bands on the thorax are both continuous.

Hab. St. Martin's Falls, Hudson's Bay. (Coll. G. Barnston, Esq.)

Fam. 2. POMPILIDÆ.

Genus 1. POMPILUS.

Sphex, pt., *Linn. Syst. Nat.* i. 941 (1766).
Evania, pt., et Sphex, pt., *Fabr. Ent. Syst.* ii. 192, 198 (1793).
Pompilus, pt., *Fabr. Ent. Syst. Supp.* p. 246 (1798).
Ceropales, pt., et Pompilus, pt., *Fabr. Syst. Piez.* p. 185. 187 (1804).
Priocnemis, Agenia, Pompilus, et Episyron, *Schiödte, Mon. Pomp. Kröyer, Tidsskr.* i. 324. 321. 331 (1837).
Calicurgus, Anoplius, et Pompilus, *St. Farg. Hym.* iii. 397. 440. 416 (1845).

1. POMPILUS FUSCUS. B.M.

Sphex fusca, *Linn. Faun. Suec.* no. 1652; *Syst. Nat.* i. 944. 16 ♀, *& Cab. Mus. Linn. Soc.*
De Geer, Ins. ii. 822. t. 28. f. 6.
Sphex viatica, *Scop. Ent. Carn.* p. 294. 780.
Fabr. Syst. Ent. p. 349. 20; *Ent. Syst.* ii. 210. 47 ♀.
Rossi, Faun. Etrus. ii. 62. 814.
Müller, Prodr. Zool. Dan. 160. 1864.
Pompilus viaticus, *Fabr. Ent. Syst. Supp.* p. 246. 4 ♀; *Syst. Piez.* p. 191. 12.
Panz. Faun. Germ. 65. 16; *Krit. Revis.* ii. 118.
Spin. Ins. Lig. i. 68. 2.
St. Farg. & Serv. Ency. Méth. x. 179. 1.

Pompilus viaticus, *Van d. Lind. Hym.* i. 342. 40 ♂ ♀.
Shuck. Foss. Hym. 61. 12.
Zett. Ins. Lapp. 437. 3.
Dahlb. Mon. Pomp. 44; *Exercit. Hym.* 62. 4; *Hym. Europ.* i. 57. 29.
Brullé, Exped. Sc. de Morée, iii. 364. 804.
St. Farg. Hym. iii. 431. 24.
Guér. Icon. R. Anim. t. 70. f. 1.
Lucas, Explo. Sc. Algér. iii.
Pompilus fuscus, *Schiödte, Mon. Pomp. Kröy. Tidsskr.* i. 339. 8.
Smith, Cat. Brit. Hym. 13. 12.

Hab. Britain; France; Italy; Germany; Denmark; Sweden; Lapland; Morea; Algeria.

2. POMPILUS GIBBUS. B.M.

Sphex gibba, *Fabr. Syst. Ent.* p. 350. 23; *Ent. Syst.* ii. 212. 59 ♀.
Rossi, Faun. Etrus. ii. 63. 816.
Pompilus gibbus, *Fabr. Ent. Syst. Supp.* p. 249. 17 ♀; *Syst. Piez.* p. 193. 27.
Panz. Faun. Germ. 77. 13; *Krit. Revis.* ii. 119.
St. Farg. & Serv. Ency. Méth. x. 179. 2.
Van d. Lind. Hym. i. 338. 35 ♂ ♀.
Shuck. Foss. Hym. p. 62. 13.
Schiödte, Mon. Pomp. Kröy. Tidsskr. i. 336. 6.
Brullé, Hist. nat. Il. Canar. iii. 92. 57.
St. Farg. Hym. iii. 435. 30.
Lucas, Explo. Sc. Algér. iii.
Smith, Cat. Brit. Hym. p. 13. 13.
Pompilus curtus, *Zett. Ins. Lapp.* 438. 4?
Pompilus trivialis, *Dahlb. Hym. Europ.* i. 65. 30?
Pompilus minutulus, *Dahlb. Hym. Europ.* i. 66. 67.
Pompilus gibbulus, *St. Farg. Hym.* iii. 436. 31.

Hab. Britain; France; Germany; Italy; Denmark; Sweden Lapland; Algeria.

The neuration of the wings in this species is subject to great variation: the third submarginal cell is usually angular, but it differs from this type of form, and is frequently only narrowed by one-half towards the marginal cell: these variations cannot be considered as specific distinctions.

3. POMPILUS SPISSUS. B.M.

Pompilus spissus, *Schiödte, Mon. Pomp. Kröy. Tidsskr.* i. 336. 5.
Dahlb. Hym. Europ. i. 70. 34.
Pompilus fuscus, *Zett. Ins. Lapp.* p. 437. 1 ♂ var.

Hab. Britain; Germany; Denmark; Sweden.

4. POMPILUS SERICATUS.

Pompilus sericatus, *Shuck. Foss. Hym.* p. 60. 11.
Priocnemis sericatus, *Dahlb. Hym. Europ.* i. 111. 53 (var. P. fuscus ?).

Hab. Britain.

5. POMPILUS AFFINIS. B.M.

Pompilus affinis, *Van d. Lind. Obs.* i. 67. 34.
Shuck. Foss. Hym. p. 65. 16.
Smith, Cat. Brit. Hym. p. 14. 15.
Priocnemis affinis, *Dahlb. Hym. Europ.* p. 103. 48.
Calicurgus affinis, *St. Farg. Hym.* iii. 413. 23.

Hab. Britain; France; Sweden.

6. POMPILUS AGILIS. B.M.

Priocnemis obtusiventris, *Schiödte, Dispos.* 17. 6 ♂?
Dahlb. Hym. Europ. i. 115. 56.
Pompilus agilis, *Shuck. Foss. Hym. Append.* 251 (var. P. notatus ♂? var. P. exaltatus ♀?).

Hab. Britain; Denmark; Sweden.

7. POMPILUS EXALTATUS. B.M.

Sphex gibba, *Scop. Ent. Carn.* p. 296. 786 (nec *Linn.*).
Sphex exaltata, *Fabr. Syst. Ent.* p. 351. 31; *Ent. Syst.* ii. 251. 31.
Vill. Entom. iii. 239. 47.
Rossi, Faun. Etrus. i. 64. 820.
Sphex revo, *Harris, Expos.* p. 95. t. 28. f. 3.
Sphex albomaculata, *Schrank, Ins. Aust.* p. 383. 775.
Vill. Entom. iii. 249. 80.
Gmelin, ed. Linn. Syst. Nat. 2734. 87.
Pompilus exaltatus, *Fabr. Ent. Syst. Supp.* p. 251. 31; *Syst. Piez.* p. 195. 41.
Panz. Faun. Germ. 195. 41, & 86. 10.
Latr. Hist. Nat. Crust. et Ins. xiii. 281. 3.
St. Farg. & Serv. Ency. Méth. x. 182. 15.
Spin. Ins. Lig. i. 70. 8.

Pompilus exaltatus, *Van d. Lind. Obs.* i. 334. 30.
Shuck. Foss. Hym. p. 66. 17.
Dahlb. Mon. Pomp. 6. 8; *Exercit. Hym.* 62. 8.
Zett. Ins. Lapp. p. 438. 6.
Smith, Cat. Brit. Hym. p. 14. 17.
Priocnemis exaltatus, *Schiödte, Mon. Pomp. Kroy. Tidsskr.* i. 330. 7.
Dahlb. Hym. Europ. p. 113. 55.

Hab. Britain; France; Germany; Italy; Denmark; Sweden; Lapland.

8. POMPILUS SEPICOLA. B.M.

Sphex fusca, *Fabr. Syst. Ent.* p. 349. 19; *Ent. Syst.* ii. 210. 46 (nec *Linn.*).
Rossi, Faun. Etrus. ii. 62. 813.
Pompilus fuscus, *Fabr. Ent. Syst. Supp.* p. 246. 3; *Syst. Piez.* p. 189. 11.
Panz. Faun. Germ. 65. 15; *Krit. Revis.* ii. 118.
Van d. Lind. Obs. i. 336. 33.
Shuck. Foss. Hym. p. 64. 15.
Priocnemis fuscus, *Schiödte, Mon. Pomp.* i. 328. 4.
Dahlb. Hym. Europ. i. 102. 46.
Calicurgus fuscus, *St. Farg. Hym.* iii. 412. 22.
Pompilus serripes, *Dahlb. Mon. Pomp.* p. 3. 3; *Exercit. Hym.* 61. 3.
Pompilus sepicola, *Smith, Cat. Brit. Hym.* 14. 16.

Hab. Britain; France; Italy; Germany; Denmark; Sweden.

9. POMPILUS RUFIPES. B.M.

Sphex rufipes, *Linn. Faun. Suec.* no. 1659; *Syst. Nat.* i. 945. 29, and *Cab. Mus. Linn. Soc.*
Fabr. Ent. Syst. ii. 214. 66.
Sphex fuscata, *Fabr. Ent. Syst.* ii. 212. 57.
Pompilus fuscatus, *Fabr. Ent. Syst. Supp.* p. 248. 14 (var.); *Syst. Piez.* p. 192. 22.
Pompilus rufipes, *Fabr. Ent. Syst. Supp.* p. 250. 27; *Syst. Piez.* p. 195. 37.
Panz. Faun. Germ. 65. 17; *Krit. Revis.* ii. 119.
Latr. Hist. Nat. Crust. et Ins. xiii. 281. 6.
Spin. Ins. Lig. i. 69. 6.
St. Farg. & Serv. Ency. Méth. x. 180. 3.
Van d. Lind. Obs. i. 329. 24.
Curtis, Brit. Ent. v. t. 238.
Brullé, Exped. Sc. Morée, iii. 364. 804; *Atlas*, t. 50. f. 4 ♂.

Pompilus rufipes, *Dahlb. Mon. Pomp.* 11. 16; *Exercit. Hym.* 67. 18; *Hym. Europ.* i. 50. 27.
St. Farg. Hym. iii. 421. 7.
Pompilus albonotatus, *Van d. Lind. Obs.* i. 328. 23.
Dahlb. Hym. Europ. i. 53.
Pompilus bipunctatus, *Dahlb. Mon. Pomp.* 12. 19 (var.); *Exercit. Hym.* 67. 19 (var.).
Pompilus septemmaculatus, *Dahlb. Mon. Pomp.* 11. 17; *Exercit. Hym.* 67. 19.
Episyron rufipes, *Schiödte, Mon. Pomp. Kroy. Tidsskr.* i. 343. 1.
Pompilus tripunctatus, *Van d. Lind. Obs.* i. 332. 26 (var.).
Dahlb. Hym. Europ. i. 49. 22.

Hab. Britain; France; Germany; Italy; Denmark; Sweden.

10. POMPILUS VARIABILIS. B.M.

Sphex variabilis, *Rossi, Faun. Etrus.* ii. 99. 821.
Sphex variegata, *Fabr. Ent. Syst.* ii. 211. 53 (nec *Linn.*).
Sphex bipunctata, *Fabr. Ent. Syst.* ii. 214. 67.
Pompilus variegatus, *Fabr. Ent. Syst. Supp.* p. 247. 10.
Panz. Faun. Germ. 77. 12.
Pompilus 6-punctatus, *Fabr. Ent. Syst. Supp.* p. 248. 15.
Pompilus bipunctatus, *Fabr. Ent. Syst. Supp.* p. 251. 28; *Syst. Piez.* p. 195. 38.
Panz. Faun. Germ. 72. 8; *Krit. Revis.* 2. 119.
Van d. Lind. Obs. 330. 25 (var. *a*).
Salius 6-punctatus, *Fabr. Syst. Piez.* p. 125. 3.
Pompilus decemguttatus, *Jurine, Hym.* i. t. 8.
Pompilus variabilis, *Van d. Lind. Obs.* p. 57. 21.
Pompilus Fabricii, *Van d. Lind. Obs.* p. 57. 22.
Priocnemis variegatus, *Dahlb. Hym. Europ.* i. 98. 45.
Calicurgus variabilis, scurra, bipunctatus, binotatus, Fabricii, *St. Farg. Hym. Europ.* iii. 399–403. 2, 3, 4, 6, 7.
Anoplius sexpunctatus, *St. Farg. Hym.* iii. 447. 10.

Hab. Britain; Italy; France; Germany; Spain; Portugal; Saxony; Sweden.

11. POMPILUS PLUMBEUS. B.M.

Sphex plumbea, *Fabr. Mant.* i. 278. 64; *Ent. Syst. Supp.* ii. 220. 92.
Rossi, Faun. Etrus. i. 127. 280.
Pompilus pulcher, *Fabr. Ent. Syst. Supp.* 249. 19.
Spin. Ins. Lig. i. 69. 4.
Van d. Lind. Obs. i. 307. 2.
Shuck. Foss. Hym. p. 49. 1.

Pompilus pulcher, *Dahlb. Hym. Europ.* i. 42. 22?
St. Farg. Hym. iii. 424. 11.
Lucas, Explo. Sc. Algér. iii. 268.
Pompilus plumbeus, *Dahlb. Hym. Europ.* i. 42. 21.
Smith, Cat. Brit. Hym. 10. 1.

Hab. Britain; France; Germany; Italy; Denmark; Algeria; Port Natal.

12. POMPILUS PECTINIPES. B.M.

Sphex pectinipes, *Linn. Faun. Suec.* no. 1654; *Syst. Nat.* i. 944. 17, and *Cab. Mus. Linn. Soc.*
Pompilus crassicornis, *Shuck. Foss. Hym.* p. 63. 14.
Schiödte, Mon. Pomp. Kroy. Tidsskr. i. 335. 4.
Dahlb. Disp. p. 10. 39.
Van d. Lind. Obs. i. 341. 39.
Pompilus pectinipes, *Dahlb. Hym. Europ.* i. 68. 33.
Smith, Cat. Brit. Hym. p. 14. 14.

The neuration of the wings in this species is very inconstant; the second transverse cubital nervure is sometimes obsolete; where this is the case, the species has been mistaken for the genus *Aporus* of Spinola!, which has the prothorax elongate, and the wings inserted exactly in the middle of the thorax on each side!

Hab. Britain; Denmark; Sweden.

13. POMPILUS HYALINATUS. B.M.

Sphex hyalinata, *Fabr. Ent. Syst.* ii. 212. 56 ♂.
Pompilus hyalinatus, *Fabr. Ent. Syst. Supp.* p. 248. 13.
Van d. Lind. Obs. i. 316. 11.
Shuck. Foss. Hym. p. 57. 8.
Smith, Cat. Brit. Hym. p. 12. 8.
Liris hyalinata, *Fabr. Syst. Piez.* p. 230. 11.
Pompilus fasciatellus, *Spin. Ins. Lig.* ii. 37. t. 5. f. 22 ♀.
Van d. Lind. Obs. i. 335. 31.
Shuck. Foss. Hym. p. 67. 18.
Smith, Cat. Brit. Hym. p. 12. 8 ♂ ♀.
Priocnemis hyalinatus, *Schiödte, Mon. Pomp. Kroy. Tidsskr.* i. 46. 11 ♂.
Priocnemis fasciatellus, *Schiödte, Mon. Pomp. Kroy. Tidsskr.* i. 329. 5 ♀.
Dahlb. Hym. Europ. i. 105. 49.
Priocnemis hyalinatus, *Dahlb. Hym. Europ.* i. 94. 44 ♂.
Pompilus calcaratus, *Dahlb. Mon. Pomp.* 14. 21; *Exercit. Hym.* 69. 23.

Pompilus maculipennis, *Dahlb. Mon. Pomp.* 6. 7; *Exercit. Hym.* 62. 7.
Anoplius bidens, *St. Farg. Hym.* iii. 455. 23 ♂.
Anoplius punctum, *St. Farg. Hym.* iii. 456. 26 ♂ var.
Calicurgus fasciatellus, *St. Farg. Hym.* iii. 415. 26 ♀.

Hab. Europe.

14. POMPILUS ACUMINATUS. B.M.

Pompilus acuminatus, *Smith, Cat. Brit. Hym. Append.* 119.

Hab. Britain.

15. POMPILUS NIGER. B.M.

Sphex nigra, *Fabr. Syst. Ent.* p. 350. 22; *Ent. Syst.* ii. 211. 51. *Rossi, Faun. Etrus.* ii. 64. 819.
Pompilus niger, *Fabr. Ent. Syst. Supp.* p. 247. 8; *Syst. Piez.* p. 191. 15.
Panz. Faun. Germ. 71. 19 ♀.
St. Farg. & Serv. Ency. Méth. x. 180. 4.
Van d. Lind. Obs. i. 306. 1.
Shuck. Foss. Hym. p. 50. 2.
Dahlb. Hym. Europ. i. 45. 24.
Zett. Ins. Lapp. p. 439. 9.
Schiödte, Mon. Pomp. Kroy. Tidsskr. i. 334. 3.
Smith, Cat. Brit. Hym. p. 11. 2.
Anoplius niger, *St. Farg. Hym.* iii. 451. 17.

Hab. Britain; France; Germany; Denmark; Sweden; Lapland.

16. POMPILUS PUNCTUM. B.M.

Sphex punctum, *Fabr. Spec. Ins.* i. 448. 33; *Mantis.* i. 276. 39 ♂.
Evania punctum, *Fabr. Ent. Syst.* ii. 194. 6.
Ceropales punctum, *Fabr. Syst. Piez.* p. 187. 9.
Pompilus punctum, *Panz. Faun. Germ.* 86. 12.
Van d. Lind. Obs. i. 315. 10.
Shuck. Foss. Hym. p. 56. 7.
Smith, Cat. Brit. Hym. 12. 7; *Trans. Ent. Soc.* iii. new ser.
Pompilus petiolatus, *Van d. Lind. Obs.* i. 314. 9.
Shuck. Foss. Hym. p. 54. 5.
Smith, Cat. Brit. Hym. 11. 5.
Agenia carbonaria, *Dahlb. Hym. Europ.* i. 90. 43 ♂ ♀.
Anoplius albigena, *St. Farg. Hym.* iii. 457. 27 ♂.
Anoplius hyalinatus, *St. Farg. Hym.* iii. 458. 28.

Anoplius petiolatus, *St. Farg. Hym.* iii. 443. 3 ♀.
Anoplius submarginatus, *St. Farg. Hym.* iii. 443. 2 (var.?).

Hab. Britain; France; Germany; Italy; Sweden.

17. POMPILUS BIFASCIATUS. B.M.

Sphex bifasciata, *Fabr. Ent. Syst.* ii. 212. 58.
Pompilus bifasciatus, *Fabr. Ent. Syst. Supp.* p. 248. 16; *Syst. Piez.* p. 193. 26.
Panz. Faun. Germ. 86. 11; *Krit. Revis.* ii. 119.
Latr. Hist. Nat. Crust. et Ins. xiii. 281. 4.
Coqueb. Illust. i. 20. t. 4. f. 11.
Spin. Ins. Lig. i. 69. 3.
Van d. Lind. Obs. i. 40. 5.
Shuck. Foss. Hym. p. 52. 3.
Smith, Cat. Brit. Hym. 11. 3.
Agenia bifasciata, *Schiödte, Mon. Pomp. Kroy. Tidsskr.* i. 323. 2.
Anoplius bifasciatus, *St. Farg. Hym.* iii. 459. 30.

Hab. Britain; France; Germany; Denmark.

18. POMPILUS CINCTELLUS. B.M.

Pompilus cinctellus, *Spin. Ins. Lig.* ii. 39. 34 ♀.
Van d. Lind. Obs. i. 319. 13 ♂ ♀.
Shuck. Foss. Hym. p. 55. 6.
Schiödte, Mon. Pomp. Kroy. Tidsskr. i. 333. 1. t. 4. f. A.
Dahlb. Hym. Europ. i. 38. 19.
Smith, Cat. Brit. Hym. p. 12. 6.
Pompilus clypeatus, *Dahlb. Mon. Pomp.* 14. 22; *Exerc. Hym.* 69. 24 ♀.
Pompilus punctipes, *Dahlb. Exercit. Hym.* 65. 15 ♂.
Anoplius cinctellus, *St. Farg. Hym.* iii. 453. 19 ♀.
Anoplius tibialis, *St. Farg. Hym.* iii. 454. 21 ♂.

Hab. Britain; France; Italy; Germany; Denmark; Sweden.

19. POMPILUS NOTATUS. B.M.

Sphex notata, *Rossi, Faun. Etrus. Mant.* i. 127. 281 ♂.
Pompilus gutta, *Spin. Ins. Lig.* ii. 40. 35.
Pompilus notatus, *Van d. Lind. Obs.* i. 317. 12.
Shuck. Foss. Hym. p. 59. 10.
Steph. Ill. Brit. Hym. vii. *Supp.* 13. t. 42. f. 2.
* *Smith, Cat. Brit. Hym.* p. 13. 10.
Pompilus femoralis, *Dahlb. Mon. Pomp.* 13. 10; *Exercit. Hym.* 68. 22.

Priocnemis notatus, *Schiödte, Mon. Pomp. Kroy. Tidsskr.* i. 327. 2.
Priocnemis femoralis, *Dahlb. Hym. Europ.* i. 109. 51.
Anoplius notatus, *St. Farg. Hym.* iii. 462. 35.
Pompilus agilis, *Shuck. Foss. Hym. Append.* p. 251(var. ♂?).

Hab. Britain; France; Germany; Italy; Denmark; Sweden.

20. POMPILUS VARIEGATUS. B.M.

Sphex variegata, *Linn. Syst. Nat.* i. 944. 18, *& Cab. Mus. Linn. Soc.*
Müller, Prodr. Z. D. 160. 1867.
Villers, Entom. iii. 231. 30.
Pompilus hircanus, *Fabr. Ent. Syst. Supp.* p. 251. 31; *Syst. Piez.* p. 195. 40.
Panz. Faun. Germ. 87. 21; *Krit. Revis.* 2. 119.
Spin. Ins. Lig. ii. 172. 12.
Jurine, Hym. p. 122.
Dahlb. Mon. Pomp. 7. 9.
Zett. Ins. Lapp. p. 439. 8.
Pompilus variegatus, *Illig. Faun. Etrus.* ii. 99. 820.
St. Farg. & Serv. Ency. Méth. x. 180. 8.
Van d. Lind. Obs. i. 311. 6.
Dahlb. Exercit. Hym. 64. 11.
Shuck. Foss. Hym. p. 53. 4.
Smith, Cat. Brit. Hym. 11. 4.
Agenia variegata, *Schiödte, Mon. Pomp. Kroy. Tidsskr.* i. 322. 1.
Dahlb. Hym. Europ. i. 88. 42.
Anoplius variegatus, *St. Farg. Hym.* iii. 445. 6.

Hab. Britain; France; Germany; Italy; Denmark; Sweden; Lapland.

21. POMPILUS ATER.

Pompilus ater, *St. Farg. Hym.* iii. 428. 18 ♀.

Hab. France.

22. POMPILUS APICALIS. B.M.

Pompilus apicalis, *Van d. Lind. Obs.* i. 312. 7.
Anoplius apicalis, *St. Farg. Hym.* iii. 444. 4.

Hab. France; Germany.

23. POMPILUS ANNULATUS. B.M.

Sphex annulata, *Fabr. Ent. Syst. Supp.* p. 245. 89–90.
Pompilus annulatus, *Fabr. Syst. Piez.* p. 197. 53.
Panz. Faun. Germ. 76. 16.
St. Farg. & Serv. Ency. Méth. x. 184. 12.
Van d. Lind. Obs. i. 346. 43.
Priocnemis annulatus, *Dahlb. Hym. Europ.* i. 100.
Calicurgus annulatus, *St. Farg. Hym.* iii. 398. 1.
Cryptocheilus annulatus, *Panz. Krit. Revis.* ii. 121.

Hab. Europe.

24. POMPILUS ALTERNATUS.

Pompilus alternatus, *St. Fdrg. Hym.* iii. 417. 2.

Hab. France.

25. POMPILUS CHALYBEATUS.

Pompilus chalybeatus, *Dahlb. Hym. Europ.* i. 73. 35 ♂.

Hab. Germany; Denmark.

26. POMPILUS CINGULATUS.

Sphex cingulata, *Rossi, Faun. Etrus.* (*Illig.*) ii. 98. 818 ♂.
Pompilus pulcher, *Illig. Ed. Faun. Etrus.* ii. 98. 818 ♂.
Pompilus cingulatus, *Van d. Lind. Obs.* i. 308. 3.
Schiödte, Dispos. 29. 10.

Hab. Italy; France; Dalmatia; Portugal.

27. POMPILUS CILIATUS.

Pompilus ciliatus, *St. Farg. Hym.* iii. 416. 1.

Hab. France (Paris).

28. POMPILUS COCCINEUS.

Pompilus coccineus, *Fabr. Syst. Piez.* p. 191. 18.
St. Farg. & Serv. Ency. Méth. x. 181. 14.
Van d. Lind. Obs. i. 343. 41.

Hab. Germany; France.

29. POMPILUS NITENS.

Larra micans, *Spin. Ins. Lig.* fasc. i. p. 14. t. 1. f. 8 (var. P. plumbeus ♀ ?).
Pompilus micans, *Spin. Ins. Lig.* fasc. ii. p. 75.
Van d. Lind. Obs. i. 310. 4 (nec *Fabr.*).

Hab. France.

30. POMPILUS ERICETORUM.

Pompilus ericetorum, *St. Farg. Hym.* iii. 438. 34 ♀.

Hab. France.

31. POMPILUS GRACILIS. B.M.

Pompilus gracilis, *St. Farg. Hym.* iii. 420. 6.

Hab. France.

32. POMPILUS INFUSCATUS.

Pompilus infuscatus, *Van d. Lind. Obs.* i. 339. 36.
St. Farg. Hym. iii. 437. 32 (var. *P. sepicola*?).

Hab. France; Belgium.

33. POMPILUS LINDENII.

Pompilus Lindenii, *St. Farg. Hym.* iii. 437. 33 ♀.

Hab. France (Paris).

34. POMPILUS MERIDIONALIS.

Pompilus australis, *St. Farg. Hym.* iii. 431. 23 (nec *Guér.*).

Hab. Europe.

35. POMPILUS MERIDIANUS.

Pompilus meridianus, *St. Farg. Hym.* iii. 430. 22.

Hab. South of Europe.

36. POMPILUS PHÆOPTERUS.

Pompilus phæopterus, *Van d. Lind. Obs.* i. 340. 37 ♀.

Hab. Montpellier.

37. POMPILUS PYRENÆUS.

Pompilus pyrenæus, *St. Farg. Hym.* iii. 429. 19.

Hab. France.

38. POMPILUS QUADRIPUNCTATUS. B.M.

Sphex quadripunctata, *Fabr. Ent. Syst.* ii. 219. 89.
Pepsis quadripunctatus, *Fabr. Syst. Piez.* p. 215. 39.

Pompilus quadripunctatus, *Dahlb. Hym. Europ.* i. 53. 28.
St. Farg. & Serv. Ency. Méth. x. 181. 10.
Van d. Lind. Obs. i. 324. 19.
St. Farg. Hym. iii. 418. 4.
Pompilus octopunctatus, *Panz. Faun. Germ.* 76. 17.

Hab. France; Germany; Spain.

39. POMPILUS VICINUS.

Pompilus vicinus, *St. Farg. Hym.* iii. 428. 17 ♀.

Hab. France (Paris).

40. POMPILUS SCURRA. B.M.

Pompilus scurra, *St. Farg. Hym.* iii. 400. 3 ♀.

Hab. South of France; Albania; Algeria.

41. POMPILUS AMBULATOR. B.M.

Calicurgus ambulator, *St. Farg. Hym.* iii. 412. 21 (var. P. vulgaris?).

Hab. France.

42. POMPILUS LUTEIPENNIS.

Pompilus luteipennis, *Fabr. Syst. Piez.* p. 198. 54.
Van d. Lind. Obs. i. 323. 18.
Lucas, Explo. Sc. Algér. iii. 267.
Priocnemis luteipennis, *Dahlb. Hym. Europ.* i. 458. 13.

Hab. South of Europe; Africa.

43. POMPILUS MINUTUS.

Pompilus minutus, *Van d. Lind. Obs.* i. 344. 42.
Dahlb. Hym. Europ. i. 118. 59.
Calicurgus minutus, *St. Farg. Hym.* iii. 415. 27.

Hab. Belgium; Sweden.

44. POMPILUS ODONTELLUS.

Calicurgus odontellus, *St. Farg. Hym.* iii. 414. 25.

Hab. France.

45. POMPILUS PROPINQUUS. B.M.

Calicurgus propinquus, *St. Farg. Hym.* iii. 410. 16.

Hab. France; Albania.

46. POMPILUS VULGARIS.

Calicurgus vulgaris, *St. Farg. Hym.* iii. 411. 20.

Hab. France.

47. POMPILUS RUBRICANS.

Calicurgus rubricans, *St. Farg. Hym.* iii. 409. 16.

Hab. Forest of Bondy.

48. POMPILUS HÆMATOPUS.

Anoplius hæmatopus, *St. Farg. Hym.* iii. 444. 5.

Hab. Europe.

49. POMPILUS SANGUINOLENTUS.

Sphex sanguinolenta, *Fabr. Ent. Syst.* ii. 211. 54.
Pompilus sanguinolentus, *Fabr. Syst. Piez.* 192. 19.
St. Farg. & Serv. Ency. Méth. x. 180. 6.
Van d. Lind. Obs. 320. 14.
Anoplius sanguinolentus, *St. Farg. Hym.* iii. 455. 24.
Salius sanguinolentus, *Dahlb. Hym. Europ.* 31. 17.

Hab. France; Germany.

50. POMPILUS UNIOCELLATUS.

Anoplius uniocellatus, *Dufour, Ann. Soc. Ent. Fr.* ii. 483.

Hab. Europe.

51. POMPILUS PAULINIERII.

Pompilus Paulinierii, *Guér. Mag. Zool.* 1843, t. 116. f. 1.

Hab. Spain.

52. POMPILUS MELANARIUS.

Pompilus melanarius, *Van d. Lind. Obs.* i. 321. 15.
Dahlb. Hym. Europ. i. 46. 25.

Hab. Spain.

53. POMPILUS GRAELLSII. B.M.

Pompilus Graellsii, *Guér. Mag. Zool.* 1843, t. 115. f. 2 ♂.

Hab. Spain (Barcelona).

54. POMPILUS FUSCIPENNIS.

Pompilus fuscipennis, *Van d. Lind. Obs.* i. 321. 16.

Hab. Spain.

55. POMPILUS ALBIFRONS.

Pompilus albifrons, *Dalm. Anal. Entom.* p. 97. 12.
Van d. Lind. Obs. i. 335. 32.
Priocnemis albifrons, *Dahlb. Hym. Europ.* i. 107. 50.
Hab. Sweden.

56. POMPILUS ABNORMIS.

Pompilus abnormis, *Dahlb. Hym. Europ.* i. 67. 32.
Hab. Sweden.

57. POMPILUS CONSOBRINUS.

Pompilus consobrinus, *Dahlb. Hym. Europ.* i. 79. 38.
Hab. Sweden.

58. POMPILUS DISPAR.

Pompilus dispar, *Dahlb. Hym. Europ.* i. 75. 36 ♀ (P. chalybeatus ♀?).
Hab. Sweden.

59. POMPILUS FUMIPENNIS.

Pompilus fumipennis, *Dahlb. Hym. Europ.* i. 76. 37.
Hab. Sweden; Lapland.

60. POMPILUS INTERMEDIUS.

Agenia intermedia, *Dahlb. Hym. Europ.* i. 86. 41.
Hab. Sweden.

61. POMPILUS NUDIPENNIS.

Priocnemis nudipennis, *Dahlb. Hym. Europ.* i. 117. 58 ♀.
Priocnemis minor, *Zett. Ins. Lapp.* p. 438. 7 ♂?
Dahlb. Hym. Europ. i. 116. 57.
Hab. Lapland; Sweden.

62. POMPILUS SERICEUS.

Pompilus sericeus, *Van d. Lind. Obs.* i. 313. 8 ♀.
Schiödte, Mon. Pomp. Kröy. Tidsskr. i. 334. 2.
Dahlb. Hym. Europ. i. 40. 20.
St. Farg. Hym. iii. 428. 16?
Hab. Denmark.

63. Pompilus ambiguus. B.M.

Female. Length 8½ lines.—Black: antennæ, labrum, palpi, and mandibles in the middle ferruginous; the cheeks and margin of the vertex thinly covered with long black pubescence; the thorax has also a scattered long black pubescence, the metathorax transversely rugose; the wings reddish-yellow, their extreme base black; the first recurrent nervure received near the apex of the second submarginal cell; a fuscous transverse stripe at the apex of the anterior pair, leaving the tip pale; the tibiæ, tarsi and knees ferruginous, the two former thickly spinose exteriorly; the abdomen has an obscure sericeous pilosity, its extreme apex rufo-testaceous.

Hab. Polish Ukraine.

64. Pompilus sesquialterus.

Pompilus sesquialterus, *Fisch. de Wald. Mag. Zool.* 1843, t. 122. f. 3.

Hab. Russia (Lower Volga).

65. Pompilus alienus.

Pompilus alienus, *Fisch. de Wald. Mag. Zool.* (*Guér.*) 1843.

Hab. Russia.

66. Pompilus egregius.

Calicurgus egregius, *St. Farg. Hym.* iii. 402. 5 (P. variabilis, var. ?).

Hab. Corsica.

67. Pompilus dichrous.

Pompilus dichrous, *Brullé, Hist. Nat. Il. Canar.* iii. 92. 58.

Hab. Canary Islands; Sicily. (Coll. F. Smith.)

68. Pompilus violaceipennis.

Pompilus violaceipennis, *Brullé, Hist. Nat. Il. Canar.* iii. 92. 59.

Hab. Canary Islands.

69. Pompilus brunneus.

Pompilus brunneus, *Klug, Symb. Phys.* dec. iv. no. 2. t. 38. f. 2.

Hab. Syria.

70. POMPILUS MŒSTUS.

Pompilus mœstus, *Klug, Symb. Phys.* dec. iv. no. 12. t. 38. f. 12.
Hab. Syria.

71. POMPILUS UMBROSUS.

Pompilus umbrosus, *Klug, Symb. Phys.* dec. iv. no. 16. t. 39. f. 4.
Hab. Syria.

72. POMPILUS VESPIFORMIS.

Pompilus vespiformis, *Klug, Symb. Phys.* dec. iv. no. 3. t. 38. f. 3.
Hab. Syria.

73. POMPILUS NUDATUS. B.M.

Female. Length 5 lines.—Head and antennæ pale ferruginous, five or six of the apical joints of the latter fuscous; the anterior margin of the clypeus emarginate. Thorax black; the pro- and mesothorax above, and also the scutellum and tegulæ pale ferruginous; wings fuscous; the second submarginal cell longer than the third, the latter subquadrate and slightly narrowed towards the marginal; the metathorax rounded behind, and transversely rugose-striate; the legs pale red, the intermediate and posterior coxæ black; the legs slightly spinose, the anterior tarsi ciliated. Abdomen pale ferruginous, its extreme base black.

Hab. Asia Minor (Trebizond).

74. POMPILUS MELAS.

Pompilus melas, *Klug, Symb. Phys.* dec. iv. no. 15. t. 39. f. 3.
Hab. Arabia Felix.

75. POMPILUS GENTILIS.

Pompilus gentilis, *Klug, Symb. Phys.* dec. iv. no. 14. t. 39. f. 2.
Hab. Arabia Felix.

76. POMPILUS FESTIVUS.

Pompilus festivus, *Klug, Symb. Phys.* dec. iv. no. 8. t. 38. f. 8.
Hab. Arabia.

77. POMPILUS ANTICUS. B.M.

Pompilus anticus, *Klug, Symb. Phys.* dec. iv. no. 10. t. 38. f. 10.

Hab. Arabia.

Specimens received from the Gambia have the wings subfuscous, whilst others from the same locality are dark, and have a violet iridescence.

78. POMPILUS SERICANS.

Pompilus sericans, *Klug, Symb. Phys.* dec. iv. no. 23. t. 39. f. 11.
Aporus? sericans, *Dahlb. Hym. Europ.* p. 443.

Hab. Arabia.

79. POMPILUS COMPARATUS. B.M.

Female. Length 10 lines. — Black: the head ferruginous above, the antennæ, mandibles and palpi of the same colour; the insect destitute of pubescence. Thorax: the pro- and mesothorax as well as the scutellum ferruginous; the wings yellow, their apical margins having a fuscous border; the tegulæ ferruginous; the second submarginal cell obliquely quadrate, receiving the first recurrent nervure a little beyond the middle; the metathorax transversely rugulose, having a longitudinal impressed line in the middle; the apical half of the femora, the tibiæ and tarsi ferruginous, the two latter very spinose, the posterior tibiæ externally serrated. Abdomen: the first segment obscurely ferruginous in the middle, the second segment ferruginous, its apical margin fuscous.

Hab. Tunis.

This species closely resembles *audax*, but differs in the neuration of the wings, as well as other characters.

80. POMPILUS ANTENNATUS. B.M.

Male. Length 5–6 lines.—Black: the head with a scattered black pubescence, the mandibles rufo-piceous in the middle; the antennæ very thick, tapering to a point, the joints subpectinate beneath. Thorax: the posterior margin of the prothorax angulated; the metathorax having on each side a little silvery pile; wings deep fuscous, the second and third submarginal cells of about equal length, the second submarginal cell receiving the first recurrent nervure in the middle; the tibiæ and tarsi slightly spinose. Abdomen: the apical margin of the segments with fasciæ of silvery pile; the apical segment pale testaceous.

Hab. Port Natal.

81. POMPILUS ERRANS. B.M.

Female. Length 11–15 lines.—Chestnut-brown: the tips of the mandibles and a transverse line on the vertex enclosing the stemmata black; the head and thorax beneath, the coxæ, trochanters, and basal half of the femora, fuscous or black; the metathorax black, rounded behind, transversely striated and having a central longitudinal impressed line; wings yellow, the nervures pale ferruginous, the base of the wings fusco-ferruginous, the apical margins having a dark fuscous stripe; the first recurrent nervure received by the second submarginal cell very near its apex, but not uniting with the transverse nervure. Abdomen punctured, the apical margins of the segments having fuscous fasciæ, which are continuous and broadest on the venter.

Male. Length 10 lines.—Very closely resembling the female, but the transverse stripe on the vertex is broader and emits a broad stain, which terminates at the insertion of the antennæ; the mesothorax is fuscous anteriorly and at the sides, the basal and two or three of the apical segments of the abdomen also fuscous.

Hab. Algeria; Albania.

82. POMPILUS FRATERNUS. B.M.

Female. Length 10 lines.—Head, antennæ, pro- and mesothorax, scutellum and post-scutellum, ferruginous; the metathorax, thorax beneath, coxæ, trochanters and base of the femora, black; the apical joints of the tarsi fuscous; metathorax rounded behind and transversely strongly strigose, having a central longitudinal impressed line; wings yellow, nervures pale ferruginous, the apical margins of the wings have a dark fuscous stripe; the second submarginal cell receiving the first recurrent nervure a little beyond the middle. Abdomen impunctate, fuscous or black; the second segment ferruginous, the first having usually a central ferruginous spot.

Hab. Tunis.

This species closely resembles *P. erraticus*, but the neuration of the wings is different, and the abdomen is not punctured; the second submarginal cell is obliquely square.

83. POMPILUS OCHROCERUS.

Entypus ochrocerus, *Dahlb. Hym. Europ.* i. 35. 19.

Hab. Algeria.

84. POMPILUS RUBESCENS.

Female. Length 12 lines.—Obscure rufo-fuscous, destitute of pubescence; the tips of the mandibles and anterior margin of the clypeus black. The posterior margin of the clypeus narrowly black; the mesothorax smooth, and having on each side a longitudinal impressed line, not quite extending to the anterior margin; the metathorax transversely rugose-striate; wings obscure rufo-fuscous, the second submarginal cell subquadrate, receiving the first recurrent nervure at the apex; the third submarginal cell about the same length as the second; the legs thickly spinose, the posterior tibiæ strongly serrated. Abdomen shining, delicately punctured, the basal segment impunctate.

Hab. Tripoli.

85. POMPILUS AUDAX. B.M.

Female. Length 12–15 lines. — Fusco-rufous, the antennæ, clypeus and mandibles pale ferruginous; a transverse fuscous line on the vertex; the thorax beneath, the metathorax above, the coxæ, trochanters, and femora black, the latter ferruginous at their tips; the tibiæ and tarsi thickly spinose, the posterior tibiæ strongly serrated; wings yellow, slightly fuscous at their base, their apical margins having a dark fuscous border; the second submarginal cell oblong, receiving the first recurrent nervure nearly at its apex; the metathorax transversely rugose. Abdomen covered with a fine sericeous pile and delicately punctured, the apical margins dark fuscous, the apical segment clothed with fulvous pubescence.

The male is coloured the same as the female, and has the legs similarly spined.

Hab. North Africa; Albania.

86. POMPILUS CLYPEATUS.

Pompilus clypeatus, *Klug, Symb. Phys.* dec. iv. no. 26. t. 39. f. 14.

Hab. Egypt.

87. POMPILUS FUMIGATUS.

Pompilus fumigatus, *Klug, Symb. Phys.* dec. iv. no. 19. t. 39. f. 7.

Hab. Egypt.

88. POMPILUS NIGRITULUS.

Pompilus nigritulus, *Klug, Symb. Phys.* dec. iv. no. 20. t. 39. f. 8.

Hab. Egypt.

89. POMPILUS NIGRITUS.

Pompilus nigritus, *Dahlb. Hym. Europ.* i. 47.
Hab. Africa?

90. POMPILUS ORNATUS.

Pompilus ornatus, *Klug, Symb. Phys.* dec. iv. no. 7. t. 38. f. 7.
Hab. Egypt.

91. POMPILUS RUFCIRUS.

Pompilus rufcirus, *Klug, Symb. Phys.* dec. iv. no. 17. t. 39. f. 5.
Hab. Egypt.

92. POMPILUS SUGILLATUS.

Pompilus sugillatus, *Klug, Symb. Phys.* dec. iv. no. 13. t. 39. f. 1.
Hab. Egypt.

93. POMPILUS SIGNATIPENNIS.

Pompilus signatipennis, *Klug, Symb. Phys.* dec. iv. no. 11. t. 38. f. 11.
Hab. Egypt.

94. POMPILUS TIBIALIS.

Pompilus tibialis, *Klug, Symb. Phys.* dec. iv. no. 18. t. 39. f. 6.
Hab. Egypt.

95. POMPILUS FULIGINOSUS.

Pompilus fuliginosus, *Klug, Symb. Phys.* dec. iv. no. 6. t. 38. f. 6.
Hab. Nubia.

96. POMPILUS CASTANEUS.

Pompilus castaneus, *Klug, Symb. Phys.* dec. iv. no. 9. t. 38. f. 9.
Hab. Nubia.

97. POMPILUS GLABRATUS. B.M.

Pompilus glabratus, *Klug, Symb. Phys.* dec. iv. no. 1. t. 38. f. 1.
Pompilus ornatus, *St. Farg. Hym.* iii. 417. 3?
Hab. Nubia; Gambia.

98. POMPILUS MODESTUS.

Pompilus modestus, *Klug, Symb. Phys.* dec. iv. no. 5. t. 38. f. 5.
Hab. Nubia.

99. POMPILUS RUTILUS.

Pompilus rutilus, *Klug, Symb. Phys.* dec. iv. no. 4. t. 38. f. 4.
Hab. Nubia.

100. POMPILUS CAPENSIS.

Pompilus Capensis, *Dahlb. Hym. Europ.* i. 49.
Hab. Cape of Good Hope.

101. POMPILUS BRETONII. B.M.

Pompilus Bretonii, *Guér. Mag. Zool.* 1843, t. 115. f. 2.
Hab. Africa; Senegal.

102. POMPILUS BASALIS. B.M.

Female. Length 9 lines.—Black: antennæ ferruginous, the scape fusco-ferruginous; the anterior margin of the clypeus, the labrum and mandibles obscure ferruginous, the tips of the latter black; the head and thorax clothed with long black pubescence; the tibiæ, tarsi, and tips of the femora ferruginous; the extreme base of the tarsal joints and the claw-joints black; rather more than the basal half of the wings fuscous, the apical portion yellow. Abdomen: the basal segment above, and the apical margins of the segments beneath, fringed with long black pubescence; the apex thickly villose.
Hab. Cape of Good Hope.

103. POMPILUS HISTRIO.

Pompilus histrio, *St. Farg. Hym.* iii. 440. 37.
Hab. Cape of Good Hope.

104. POMPILUS LÆTUS.

Pompilus lætus, *Dahlb. Hym. Europ.* i. 55.
Hab. Africa; Cape of Good Hope.

105. POMPILUS SULPHURESCENS.

Pompilus sulphurescens, *Dahlb. Hym. Europ.* i. 56.
Hab. Africa; Cape of Good Hope.

106. POMPILUS SUBPETIOLATUS.

Priocnemis subpetiolatus, *Dahlb. Hym. Europ.* i. 95.

Hab. Africa?

107. POMPILUS SIMILIS.

Sphex similis, *Fabr. Ent. Syst.* ii. 209. 43.
Pompilus similis, *Fabr. Ent. Syst. Supp.* 246. 2; *Syst. Piez.* p. 189. 8.

Hab. Africa.

108. POMPILUS DECIPIENS. B.M.

Female. Length 15 lines.—Black: the mandibles and palpi dark rufo-piceous; the antennæ, tips of the femora, tibiæ and tarsi, ferruginous; the two latter thickly set with short sharp spines; the posterior tibiæ strongly serrated exteriorly; the claw-joint of the tarsi fuscous; wings yellow, their base and apex fuscous; the second submarginal cell smaller than the third, which is narrowed towards the marginal; the first recurrent nervure entering the second submarginal cell near its apex; the head and thorax thinly clothed with black pubescence. Abdomen smooth and shining, delicately punctured, and slightly pubescent at its base.

Hab. Port Natal.

109. POMPILUS EXASPERATUS. B.M.

Female. Length 8–10 lines.—Black: the flagellum yellow, the scape more or less fuscous; the clypeus, labrum and mandibles fusco-ferruginous, the latter black at their tips. The mesothorax has a central longitudinal elevated ridge, and its lateral margins are raised, forming an epaulet over the tegulæ; the metathorax transversely rugose-striate; the wings have the second submarginal cell smaller than the third, both being much narrowed towards the marginal; the wings are dark brown, and have a blue, or a blue-green, iridescence; the tibiæ and tarsi thickly spinose, the spines short and acute. Abdomen blue or blue-green.

The male differs in having the legs almost destitute of spines, the posterior tibiæ alone having a few very short fine ones.

Hab. Port Natal; Congo; Sierra Leone.

110. POMPILUS FARINOSUS. B.M.

Female. Length 6½ lines.—Black: the antennæ obscure ferruginous beneath, the mandibles ferruginous at their apex; the palpi pale testaceous. Thorax impunctate; the metathorax

truncate, with a deep longitudinal impressed line in the middle; the wings pale yellow, the nervures ferruginous, their apex with a dark fuscous border; the tibiæ ferruginous and set with stout acute spines; the tarsi fusco-ferruginous, thickly spinose. Abdomen subsessile; beneath, the margins of the segments rufo-piceous.

Specimens in fine condition are covered with grey sericeous pile, but it is usually obscure.

Hab. Port Natal.

111. POMPILUS FERUS. B.M.

Female. Length 9 lines.—Black: the head and thorax covered with long black pubescence; the anterior margin of the clypeus rounded. Thorax: the wings nearly black, with a vivid purple iridescence; the second submarginal cell oblong, receiving the first recurrent nervure near its apex; the third submarginal cell as long as the second, but broader at its apex, and narrowed towards the marginal cell; the anterior and intermediate tibiæ and tarsi thickly spinose, the spines short and acute; the posterior tibiæ strongly serrated, the tarsi thickly spinose.

Hab. Port Natal.

112. POMPILUS MOROSUS. B.M.

Female. Length 6 lines.—Black: the head obscure ferruginous, the antennæ reddish-yellow beyond the three basal joints. The pro- and mesothorax, the tibiæ and tarsi obscure ferruginous; the mesothorax has a central abbreviated black line, the metathorax smooth and convex, and the tibiæ and tarsi spinose; the wings yellow, with a broad fuscous border at their apex; the tegulæ ferruginous. Abdomen subsessile, its extreme apex rufo-piceous; the insect entirely covered with an obscure sericeous pile.

This species resembles *tibialis*, but differs in having the metathorax convex, and also longer.

Hab. Port Natal.

113. POMPILUS OBSCURUS. B.M.

Female. Length 10 lines—Black: the head and thorax clothed with short black pubescence, intermixed with long black hairs; the legs thickly spinose, the posterior tibiæ strongly serrate; the wings very dark brown, with a brilliant metallic-blue iridescence; the base of the abdomen smooth and shining, the following segments covered with obscure sericeous pile.

Hab. Port Natal.

114. POMPILUS OPTIMUS. B.M.

Female. Length 11 lines.—Black: the head and thorax clothed with short black pubescence, intermixed with longer erect black hairs; the metathorax has on each side at its base an elevated tubercle, its lateral margins are elevated, and it is transversely rugose-striate; wings dark brown, with bright shades of violet and purple iridescence; the legs ferruginous, the coxæ, trochanters, and extreme base of the tibiæ black; the tibiæ and tarsi spinose, the posterior tibiæ strongly serrated; the claw-joint of the tarsi black. Abdomen: the basal segment shining, and thinly covered with long black pubescence; the second and following segments covered with an obscure sericeous pile.

Hab. Port Natal.

115. POMPILUS PRUINOSUS. B.M.

Female. Length 6½ lines.—Black: entirely covered with a fine grey pile; on the face, coxæ and metathorax it is bright and silvery; the labrum, mandibles in the middle, and the palpi ferruginous. The posterior margin of the prothorax arcuate; a fuscous stain traverses the nervure at the apex of the externo- and interno-medial cells; a similar fascia, half the width of the marginal cell, passes across the wing and terminates in the middle of the third discoidal cell; the wings have a narrow fuscous cloud at their apical margins; the tibiæ and tarsi externally spinose; the basal margins of the second and third segments of the abdomen are destitute of silvery pile.

Hab. Port Natal.

116. POMPILUS RUFO-CINCTUS. B.M.

Female. Length 4 lines.—Black: the clypeus, palpi, mandibles, and antennæ ferruginous; five or six of the apical joints of the flagellum fuscous; the face has a fine silvery pile. Thorax: the sides beneath and the metathorax covered with a fine silvery pile; the posterior margin of the prothorax arcuate; the metathorax transversely and finely rugose; wings hyaline and iridescent; a fuscous stain traverses the externo-medial nervure, and an irregular fascia runs from the base of the marginal cell to the middle of the third discoidal cell; the extreme apex of the superior wings fuscous; the tegulæ and legs ferruginous. Abdomen: the apical margins of the three basal segments ferruginous, the following segments entirely so.

Hab. Port Natal.

117. POMPILUS VITRIPENNIS. B.M.

Female. Length 9 lines.—Black: the flagellum fulvous; the mandibles, palpi and clypeus dark rufo-piceous, the anterior margin of the latter rounded; the head and thorax thinly sprinkled with erect black pubescence; the posterior margin of the prothorax arcuate; the metathorax rounded and finely transversely rugose; wings deep fuscous, with a brilliant violet iridescence; the legs without spines; the second submarginal cell receiving the first recurrent nervure a little beyond the middle. Abdomen with an obscure tinge of blue.

Hab. Port Natal.

118. POMPILUS VINDICATUS. B.M.

Female. Length 12 lines.—Black: the flagellum, except the basal joint, yellow; the anterior margin of the clypeus rounded, narrowly rufo-piceous; the head and thorax covered with short black pubescence, most dense on the metathorax, which is rounded behind; wings deep brown, with a bright violet iridescence; the second submarginal cell quadrate, the transverse nervure which separates it from the third submarginal, waved; the latter subquadrate and slightly narrowed towards the marginal cell; the anterior tibiæ and tarsi have exteriorly a row of stout sharp spines; the intermediate tibiæ and tarsi have shorter spines, which are more scattered. Abdomen having a green tinge, longitudinally aciculate; beneath, of the same colour, and similarly sculptured.

Hab. Port Natal; Congo.

Specimens from Congo, and some from Port Natal, have the antennæ black, except one, two or three of the apical joints; no other difference has been detected.

119. POMPILUS IGNITUS. B.M.

Female. Length 10 lines.—Black: the head, mandibles and antennæ ferruginous; the posterior margin of the prothorax arcuate, the mesothorax having on each side a longitudinal impressed line; the metathorax short and rounded, with a slightly impressed line in the centre; wings yellow, their extreme base and apex fuscous; the anterior femora, the apex of the intermediate and posterior pairs, the tibiæ and tarsi, reddish-yellow; the anterior tarsi strongly ciliated externally, the tibiæ sparingly and the tarsi thickly spinose; the three apical segments of the abdomen red.

Hab. Interior of South Africa. (Dr. Andrew Smith.)

120. POMPILUS LÆVIGATUS. B.M.

Female. Length 5 lines.—Reddish-yellow, impunctate; a fuscous stain in front of the stemmata; the thorax beneath, and three apical segments of the abdomen, black; the apex of the wings with a broad fuscous cloud, the second submarginal cell restricted towards the marginal, the third submarginal cell quadrate; the legs without spines or cilia.

Hab. Africa (the Gambia).

121. POMPILUS SUBVIRIDIS. B.M.

Male. Length 12 lines.—Black: the antennæ, tips of the femora, tibiæ and tarsi ferruginous; the head and thorax thinly clothed with black pubescence; the wings yellow, their base and apex fuscous; the tibiæ and tarsi furnished with numerous short spines, the tips of the tarsi black. Abdomen clothed with short iridescent green pile.

Hab. Interior of South Africa.

122. POMPILUS TAMISIERI. B.M.

Pompilus Tamisieri, *Guér. Voy. Abyss. Lefeb.* vi. 355. t. 8. f. 4.
Pompilus Combesii, *idem*, p. 355. t. 8. f. 2 var.

Hab. Senegal; Abyssinia; Port Natal.

123. POMPILUS HÆMORRHOIDALIS.

Pompilus hæmorrhoidalis, *Fabr. Syst. Piez.* p. 198. 55.

Hab. Guinea.

124. POMPILUS ANALIS. B.M.

Sphex analis, *Fabr. Ent. Syst.* ii. 209. 42; *Mus. Dom. Banks.*
Pompilus analis, *Fabr. Syst. Piez.* p. 209. 42.
Dahlb. Hym. Europ. i. 47.
St. Farg. Hym. iii. 439. 35.

Hab. India; Java; Ceylon.

125. POMPILUS BLANDUS. B.M.

Pompilus blandus, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 260.
Anoplius cyaneus, *St. Farg. Hym.* iii. 446. 7.

Hab. Bengal; N. India.

126. POMPILUS COMPTUS.

Pompilus comptus, *St. Farg. Hym.* iii. 425. 13.

Hab. India.

127. POMPILUS FULVIPENNIS. B.M.

Sphex fulvipennis, *Fabr. Ent. Syst.* ii. 218. 84.
Pompilus fulvipennis, *Fabr. Syst. Piez.* p. 198. 57.
Hemipepsis fulvipennis, *Dahlb. Hym. Europ.* i. 462. 2.

Hab. India.

128. POMPILUS FENESTRATUS. B.M.

Female. Length 3½–4 lines.—Head and thorax black; the face densely clothed with fine silvery pile; the mandibles rufo-piceous, the palpi testaceous. Thorax: the sides, beneath, and the metathorax entirely covered with bright silvery pile; wings dark fuscous, their base hyaline; the second submarginal cell wider than the third, which is narrowed towards the marginal; the legs spinose. Abdomen: the three basal segments and the base of the fourth ferruginous.

Hab. India (Bengal).

129. POMPILUS HONESTUS. B.M.

Female. Length 8 lines.—Black: head, thorax, and abdomen densely clothed with bright golden pile; the antennæ and legs ferruginous; the coxæ black and covered with golden pile; legs without spines, or merely a few very short fine ones on the tarsal joints; wings yellow, subhyaline, their nervures and the tegulæ ferruginous; the metathorax rounded behind and transversely striated; the apex of the anterior wings with a dark fuscous cloud extending to the base of the third submarginal cell. Abdomen subpetiolate.

Hab. East India.

130. POMPILUS MADRASPATANUS. B.M.

Female. Length 12 lines.—Head and thorax black, the abdomen deep blue, with tints of green; the head and thorax densely clothed with a short velvety black pubescence; wings deep fuscous; the second submarginal cell oblong, receiving the first recurrent nervure near its apex; the metathorax has on each side, at its base, a large obtuse tubercle, its disk transversely rugose, and having a central longitudinal impressed line; the legs thickly spinose, the spines short and acute. Abdomen:

the base of the second segment thickly punctured, beneath it is rugose.

Hab. India.

131. POMPILUS PEDUNCULATUS. B.M.

Female. Length 5½ lines.—Head and thorax black, the face densely clothed with silvery pile, the labrum, mandibles and palpi ferruginous. Thorax: the posterior margin of the prothorax rounded; the metathorax finely transverse-striate and having a central longitudinal faintly impressed line; wings fuscous, a subhyaline spot in the second discoidal cell; the legs ferruginous, the coxæ black, the tibiæ and tarsi very slightly spinose. Abdomen ferruginous, the petiole black.

Hab. India.

132. POMPILUS TINCTUS. B.M.

Female. Length 4 lines.—Black: the head and thorax with an obscure green tinge; the face covered with silvery pile. Thorax thinly covered with short hoary pile, most dense on the sides of the metathorax, the latter having a central longitudinal impressed line; wings hyaline, the nervures testaceous; the anterior and intermediate femora in front and the posterior pair entirely ferruginous; the legs destitute of spines, the calcaria testaceous. Abdomen smooth and shining, covered with a fine, thin, hoary pile; the apical margins of the segments narrowly testaceous.

Hab. India.

133. POMPILUS UNIFASCIATUS. B.M.

Female. Length 10 lines.—Black: head a little wider than the thorax, reddish-yellow, the antennæ, mandibles and palpi of the same colour. Thorax: above yellow; the mesothorax has its anterior margin more or less black; the metathorax without punctures or striæ, covered with short pale silky pubescence; the anterior and intermediate femora, except their extreme base, the apex of the posterior pair, the tibiæ and tarsi, reddish-yellow; the apical joints of the tarsi black; wings reddish-yellow, their apical margins fuscous; the second submarginal cell a little wider than the third, which is slightly restricted towards the marginal; the first recurrent nervure received by the second submarginal cell near its apex. Abdomen: the basal margin of the second segment with a narrow yellow fascia; the apical segment reddish-yellow; the yellow fasciæ on the abdomen sometimes obscure.

The male closely resembles the female, but has the head larger,

and the meta- and meso-thorax black, the latter having a quadrate yellow spot; the scutellum and post-scutellum yellow; all the legs spinose as in the other sex.

Hab. East India; Sumatra; North China.

134. POMPILUS DORSALIS. B.M.

Calicurgus dorsalis, *St. Farg. Hym.* iii. 407. 13.

Hab. Java; India.

135. POMPILUS JAVANUS.

Calicurgus Javanus, *St. Farg. Hym.* iii. 408. 15.

Hab. Java.

136. POMPILUS SPECULIFER.

Anoplius speculifer, *St. Farg. Hym.* iii. 422. 1.

Hab. Java.

137. POMPILUS SERICOSOMA. B.M.

Female. Length 8–10 lines.—Head and thorax yellow; the sides, or sometimes the entire metathorax, fuscous; a silken gold-coloured pile covers the entire insect; that on the abdomen, which is black, is very thin, and frequently obliterated on the basal segment; wings yellow, palest at their apical margins; the second and third submarginal cells of about equal width, the former receiving the first recurrent nervure near its apex, the latter slightly restricted towards the marginal; the legs spinose, the posterior tibiæ serrated. Abdomen: the second and third segments have their apical margins yellow-testaceous, the three apical segments entirely so.

Hab. Sumatra.

138. POMPILUS CANIFRONS. B.M.

Female. Length 6–8 lines.—Black: the face densely clothed with cinereous pile; the posterior margin of the prothorax having a cinereous band; the sides of the thorax, the legs and metathorax covered with glittering cinereous pile; the metathorax smooth, rounded behind; the tibiæ and tarsi sparingly armed with stout acute spines; wings dark fuscous; the second submarginal cell quadrate, smaller than the third, which is restricted towards the marginal. Abdomen: the basal margins of the segments with fasciæ of cinereous pile.

Hab. Sumatra.

139. POMPILUS PEDESTRIS. B.M.

Female. Length 7 lines.—Black; the head covered with cinereous pile, that on the face and clypeus very dense and silvery-white. Thorax thinly covered with cinereous pile; the anterior and posterior margins of the prothorax have bands of dense cinereous pile; that on the metathorax, sides of the thorax, and on the coxæ is very dense and silvery; the metathorax truncate posteriorly, the lateral angles slightly produced, forming obtuse tubercles; the wings fusco-hyaline, their apical margins having a darker fuscous cloud, the third submarginal cell subtriangular; the legs covered with scattered long sharp spines; the posterior tibiæ and femora ferruginous, the latter black at their base. Abdomen: the base, of all the segments, has a broad cinereous band.

Hab. Sumatra.

140. POMPILUS PERPLEXUS. B.M.

Female. Length 6 lines.—Black: the head and thorax opake; the posterior margin of the prothorax angulated, the metathorax smooth and impunctate; the wings deep fuscous, with a violet iridescence; the second and third submarginal cells of about equal length, the former receiving the first recurrent nervure near its apex; the legs sparingly spinose. Abdomen smooth and shining, and having an obscure chalybeous tinge.

Hab. Sumatra.

141. POMPILUS CÆRULEUS. B.M.

Female. Length 5–7 lines.—Bright shining blue: the antennæ, mandibles and palpi black; the face covered with fine silvery pile, the head having a thin scattered hoary pubescence; the thorax has a similar pubescence to that on the head; the pro- and meso-thorax finely rugose, the metathorax coarsely so, and having a central deeply impressed line, extending from the base to the apex; wings subhyaline, the nervures black; a fuscous cloud traversing the externo-medial nervure, a faint cloud also occupies the second submarginal cell; legs obscurely blue, without spines, the posterior femora bright red. Abdomen subpetiolate, smooth and shining.

Hab. Northern India; Sumatra.

This species resembles *P. blandus*, Guérin, but differs in the sculpture of the thorax, colour of the legs, and also materially in size.

142. Pompilus Sinensis. B.M.

Female. Length 7 lines.—Head, antennæ, mandibles and palpi, reddish-yellow; the prothorax and mesothorax above, the scutellum and tegulæ, yellow; the thorax beneath, the sides and the metathorax, as well as the coxæ and trochanters at their base, black; the femora, tibiæ and tarsi, reddish-yellow, the two latter slightly spinose; wings deep fuscous, with a bright purple iridescence; the second submarginal cell about the same length as the third, but much narrower, receiving the first recurrent nervure near its apex. Abdomen reddish-yellow, with the basal segment black; the apical margin of the second, and sometimes also of the third, fuscous.

The male has the head and thorax black, the antennæ fuscous above and obscurely yellow beneath, the labrum, mandibles and palpi yellow; the scape compressed beneath; the abdomen slightly fuscous at the base.

Hab. North China.

143. Pompilus graphicus. B.M.

Female. Length 4½ lines.—Obscure blue: the clypeus densely covered with silvery pile; the antennæ and mandibles black, the palpi testaceous; the head and thorax have a thinly scattered hoary pubescence; wings subhyaline, a faint cloud occupies the region of the second and third submarginal cells; the legs black, and covered with a fine hoary pile; the tibiæ and tarsi spinose, the posterior tibiæ serrated; the metathorax smooth and opake. Abdomen smooth and shining.

Hab. Philippine Islands.

144. Pompilus amethystinus.

Sphex amethystina, *Fabr. Ent. Syst.* ii. 210. 49.
Pepsis amethystinus, *Fabr. Syst. Piez.* p. 215. 41.
Pompilus amethystinus, *Dahlb. Hym. Europ.* i. 48.
Schomb. Faun. et Flo. Brit. Guiana, iii.
Spin. Gay's Chili, vi. 382. 8.

Hab. Brazil; Guiana.

145. Pompilus auripennis. B.M.

Pompilus auripennis, *Fabr. Syst. Piez.* p. 192. 24.
Pompilus bifasciatus, *Gray, Griff. An. Kingd.* xv. 515. 2. t. 76. f. 2 (nec *Fabr.*).

Hab. South America; Brazil (Para; Tapajos).

146. POMPILUS ÆSTIVUS. B.M.

Female. Length 8 lines.—Head and thorax densely clothed with short changeable pile reflecting shades of purple and blue; the anterior margin of the clypeus rounded, smooth and shining; the mandibles polished at their apex and armed with four acute teeth; wings dark fuscous, with a bright violet iridescence; the legs have an obscure iridescence, the tibiæ have a few scattered spines, the anterior tarsi ciliated; the metathorax rounded, and having a central longitudinal impressed line. Abdomen blue, with purple iridescence, the apex thinly covered with black pubescence.

Hab. Brazil (Para). (Coll. H. W. Bates.)

147. POMPILUS BITUBERCULATUS. B.M.

Pompilus bituberculatus, *Guér. Voy. Coq. Zool.* pt. 2. p. 258.

Hab. Brazil.

148. POMPILUS CHLOROSOMA. B.M.

Female. Length 5 lines.—Metallic green, varied with coppery and blue shades: the femora and tibiæ red, the extreme apex of the latter and the tarsi fuscous; the calcaria fuscous at the tips, the tarsi more or less red at their base; the face covered with a dense silvery pile; the entire insect has a thin changeable silvery pile, most dense on the prothorax, coxæ, and sides of the metathorax, the latter having also a thin hoary pubescence, and a slightly impressed longitudinal line in the middle; wings hyaline, iridescent, the nervures fuscous, stigma black; the tegulæ have their outer margins rufo-testaceous. Abdomen petiolate, the extreme apex rufo-piceous.

Hab. Brazil (Para). (Coll. H. W. Bates.)

149. POMPILUS CRŒSUS. B.M.

Female. Length 15 lines.—Black, covered with rich golden pile; the antennæ ferruginous, the scape and base of the first joint of the flagellum, fuscous; wings yellow, the nervures ferruginous, the apex of the superior wings pale; the coxæ covered with golden pile, the femora, tibiæ and tarsi, black; the metathorax black, rounded, and transversely rugose-striate, having a central longitudinal impressed line. Abdomen subpetiolate.

Hab. Brazil.

150. Pompilus cyaneus.

Calicurgus cyaneus, *St. Farg. Hym.* iii. 405. 10.

Hab. Brazil.

151. Pompilus dumosus.

Pompilus dumosus, *Spin. Gay's Chili*, vi. 376. 1.

Hab. Chili; Brazil.

152. Pompilus erraticus.

Pompilus erraticus, *Dahlb. Hym. Europ.* i. 60.

Hab. Brazil.

153. Pompilus familiaris. B.M.

Female. Length 6 lines.—Head black: the hinder margin of the vertex has a narrow yellow line, slightly interrupted in the middle, the line continued along the outer orbits of the eyes; the clypeus yellow, with a triangular black spot in the middle of its base, a yellow stripe on each side of the face, and a third between the antennæ running up half-way towards the anterior ocellus; the antennæ black above and fulvous beneath, the scape yellow in front; the thorax varied with yellow markings as in *P. Polistoides*; the legs red, the femora having a dark stripe above, and the intermediate tibiæ a dark stripe behind, the posterior pair are fuscous above; wings as in the preceding species. Abdomen dark fuscous, with two yellow spots at the base above; the base beneath yellow, the apical margins of the segments obscurely so.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

The form and general aspect of this insect induce me to think it possible that it may be only a differently-coloured form of the preceding species.

154. Pompilus gracillimus. B.M.

Male. Length 4 lines.—Black: head wider than the thorax; the clypeus, mandibles and palpi white, the face covered with short silvery pile; the coxæ, trochanters and femora red, the tibiæ and tarsi black, the anterior tibiæ in front and the tarsi pale rufo testaceous, a white spot at the base of the intermediate and posterior tibiæ, the calcaria white, the legs much elongated; wings hyaline, the nervures black, a fuscous cloud occupies the marginal, a portion of the second and the whole of

the third submarginal cells; the thorax covered with a fine silvery pile, the posterior margin of the prothorax white. The abdomen petiolate, compressed, much narrower than the thorax, the second segment white at its base above, having a narrow white stripe on each side beneath, the basal margins of both segments are broadly white; a white spot at the apex of the abdomen, which is acute.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

This species has very much the appearance of an *Ichneumon*.

155. POMPILUS ICHNEUMONEUS.

Pompilus ichneumoneus, *Guér. Voy. Coq. Zool.* pt. 2. p. 258; *Atlas, Ins.* no. 8. f. 13.

Hab. Brazil.

156. POMPILUS LUTEICORNIS. B.M.

Calicurgus luteicornis, *St. Farg. Hym.* iii. 404.

Hab. Brazil.

157. POMPILUS MICANS. B.M.

Pompilus micans, *Fabr. Syst. Piez.* p. 192. 23.
Agenia micans, *Dahlb. Hym. Europ.* i. 455. 2, *& type sp. Mus. Kiel.*

Hab. South America; Brazil (Santarem and Para).

158. POMPILUS PECTORALIS. B.M.

Female. Length 9 lines.—Head and thorax black, densely clothed with a changeable velvety pubescence, partaking of shades of purple, violet and blue; anterior margin of the clypeus widely emarginate; wings dark fuscous, with a brilliant violet iridescence; the metathorax rounded, not channeled down the middle; the pectus broad, transverse posteriorly, the lateral angles acute; tibiæ slightly spinose. Abdomen subpetiolate, iridescent blue, black at the base.

Hab. Brazil (Para). (Coll. H. W. Bates.)

159. POMPILUS PHALERATUS.

Pompilus phaleratus, *Perty, Del. An. Art.* p. 143. t. 27. f. 20.

Hab. Brazil (Rio. Amazons).

160. POMPILUS POLISTOIDES. B.M.

Female. Length 6 lines.—Head yellow: a transverse black line crosses the vertex immediately behind the posterior ocelli and passes over the vertex of the eyes; a black line runs from each posterior ocellus to the base of each antenna, which is fulvous, the scape being yellow in front, and five or six of the apical joints fuscous. The prothorax, sides of the thorax, and also the coxæ beneath, yellow; the legs fulvous, varied with yellow, strongly spinose; the mesothorax black, having two longitudinal yellow stripes; the scutellum brown-black, with a large half-circular yellow spot on each side; the metathorax reddish-yellow, the basal margin black, having a central broad black stripe, not extending to the apex, and a much shorter one on each side; wings hyaline, the superior pair having a broad fuscous cloud on their anterior margin. Abdomen reddish-yellow, the basal margins of the segments yellow and covered with a white pile; beneath yellow.

Hab. Brazil (Para). (Coll. H. W. Bates.)

The resemblance of this insect to a *Polistes* is so great, that it may at first sight be easily mistaken for a species of that genus.

161. POMPILUS REGIUS. B.M.

Pompilus regius, *Fabr. Syst. Piez.* p. 199. 58.
Anoplius regius, *St. Farg. Hym.* iii. 450. 14.

Hab. Brazil (Para).

162. POMPILUS SEMICINCTUS.

Pompilus semicinctus, *Dahlb. Hym. Europ.* i. 61.

Hab. Brazil.

163. POMPILUS TURCICUS. B.M.

Sphex turcica, *Fabr. Ent. Syst.* ii. 216. 76.
Pompilus turcicus, *Fabr. Syst. Piez.* p. 197. 47, *and type in Mus. Dom. Banks.*
Pompilus rufiventris, *Guér. Voy. Coq. Zool.* pt. 2. p. 260.

Hab. Brazil.

M. Guérin was misled by the description of Fabricius in the *Syst. Piez.*: having examined the type, we correct that portion which appears to be necessary:—Black: the posterior margin of the prothorax yellow; the face, scutellum, sides of the

metathorax and of the prothorax maculated with patches of golden pile; the wings dark fuscous; abdomen ferruginous, covered with fine hoary pile.

164. POMPILUS VARIUS.

Pompilus varius, *Fabr. Syst. Piez.* p. 189. 7.

Hab. South America.

165. POMPILUS RUSTICUS.

Pompilus rusticus, *Fabr. Syst. Piez.* p. 199. 59.

Hab. South America.

166. POMPILUS PULVILLATUS.

Female. Length 6½ lines.—Black, with a fine thin sericeous pile, which is most dense on the metathorax, coxæ, and sides of the thorax, and has a pale golden brilliancy; it is very dense on the face and silvery-bright; the clypeus marginate, and having a transverse row of punctures; the mandibles dark rufo-piceous towards their apex, the palpi fuscous; the antennæ slender; the intermediate and posterior tibiæ serrate exteriorly; the tarsi have the pulvillus very large and much produced; wings hyaline, the superior pair having a narrow dark fascia crossing at the base of the first and second discoidal cells, and a much broader one towards their apex enclosing the second and third submarginal cells; the metathorax rounded. Abdomen subpetiolate.

Hab. South America. (Coll. W. W. Saunders, Esq.)

167. POMPILUS MILITARIS.

Pompilus militaris, *Fabr. Syst. Piez.* p. 199. 62.

Hab. South America. (Coll. W. W. Saunders, Esq.)

168. POMPILUS FEMORATUS.

Pompilus femoratus, *Fabr. Syst. Piez.* p. 190. 13.

Hab. South America.

169. POMPILUS CAPITATUS.

Pompilus capitatus, *Fabr. Syst. Piez.* p. 188. 5.
Pompilus senilis, *Fabr. Syst. Piez.* p. 189. 6. var.?

Hab. South America.

170. Pompilus captivus.

Pompilus captivus, *Fabr. Syst. Piez.* p. 199. 61.
Agenia captiva, *Dahlb. Hym. Europ.* i. 456. 10.
Hab. South America.

171. Pompilus xanthopus.

Agenia xanthopus, *Spin. Gay's Chili*, vi. 385. 2.
Hab. Chili.

172. Pompilus sobrinus.

Pompilus sobrinus, *Spin. Gay's Chili*, vi. 379. 5.
Hab. Chili.

173. Pompilus nitidulus. B.M.

Pompilus nitidulus, *Guér. Voy. Coq. Zool.* pt. 2. p. 261.
Spin. Gay's Chili, vi. 377. 3.
Hab. Chili.

174. Pompilus nigro-cyaneus.

Pompilus nigro-cyaneus, *Guér. Voy. Coq. Zool.* pt. 2. p. 259.
Spin. Gay's Chili, vi. 383. 9.
Hab. Chili.

175. Pompilus inconspicuus.

Pompilus inconspicuus, *Spin. Gay's Chili*, vi. 378. 4.
Hab. Chili.

176. Pompilus hirsutulus.

Agenia? hirsutula, *Spin. Gay's Chili*, vi. 387. 4.
Hab. Chili.

177. Pompilus hirticeps. B.M.

Pompilus hirticeps, *Guér. Voy. Coq. Zool.* pt. 2. p. 259.
Spin. Gay's Chili, vi. 376. 2.
Hab. Chili.

178. Pompilus Gravesii. B.M.

Pompilus Gravesii, *Halid. Linn. Trans.* xvii. 325. 38.
Agenia speciosa, *Spin. Gay's Chili*, vi. 388. 5; *Atlas*, t. 4. f. 1, 1 *b*, 1 *c* ♂ ♀.
Hab. Chili.

179. Pompilus gastricus.

Pompilus gastricus, *Spin. Gay's Chili*, vi. 380. 6.
Hab. Chili.

180. Pompilus Gayi.

Agenia Gayi, *Spin. Gay's Chili*, vi. 384. 1.
Hab. Chili.

181. Pompilus flavipes.

Pompilus flavipes, *Guér. Voy. Coq. Zool.* pt. 2. p. 259.
Agenia flavipes, *Spin. Gay's Chili*, vi. 389. 6.
Hab. Chili.

182. Pompilus diphonichus.

Pompilus diphonichus, *Spin. Gay's Chili*, vi. 381. 7.
Hab. Chili.

183. Pompilus Chilensis.

Pompilus Chilensis, *Guér. Voy. Coq. Zool.* pt. 2. p. 257; *Atlas, Ins.* no. 8. f. 12.
Hab. Chili. (Coll. F. Smith.)

184. Pompilus argenteo-signata.

Agenia argenteo-signata, *Spin. Gay's Chili*, vi. 386. 3.
Hab. Chili; S. America. (Coll. W. W. Saunders, Esq.)

185. Pompilus flammipennis. B.M.

Female. Length 6 lines.—Blue: the metathorax and legs obscurely so; antennæ bright yellow; wings ferruginous, the superior pair bright red towards their anterior margins; legs spinose, the posterior tibiæ serrated; metathorax rounded behind,

having a slight longitudinal channel, and being transversely striated.

Hab. St. Domingo.

The male differs in having the apical margins of the wings dark fuscous; in the female they are faintly so.

186. POMPILUS CORUSCUS. B.M.

Female. Length 4–5 lines.—Head, thorax and legs black, thinly covered with glittering silvery pile, that on the vertex, pro- and meso-thorax with a purple shade in certain lights; the clypeus and sides of the face have a dense silvery pile; the meta-thorax rounded; the wings fuscous, with a violet iridescence; the third submarginal cell petiolated or angular; the legs spinose. Abdomen subsessile, bright ferruginous, with the apical segment black, the posterior margins of the fourth and fifth segments fuscous.

Hab. St. Domingo.

187. POMPILUS ERYTHRUS. B.M.

Female. Length 10 lines.—Brick-red: the apical joints of the antennæ and tarsi, fuscous; the clypeus emarginate, rounded at the sides; wings dark fuscous and iridescent; the tibiæ have a few scattered sharp spines, the tarsi slightly spinose, the anterior tarsi ciliated outside. Abdomen smooth, shining, and impunctate; the pectus with black stains, the rest of the body of a brighter red than above. The first recurrent nervure received by the second submarginal cell near its apex.

Hab. Jamaica.

188. POMPILUS RICHARDI.

Anoplius Richardi, *St. Farg. Hym.* iii. 447. 9.

Hab. Cayenne.

189. POMPILUS NOBILIS. B.M.

Sphex nobilis, *Fabr. Ent. Syst.* ii. 218. 85 ♀.
Pompilus nobilis, *Fabr. Syst. Piez.* p. 199, 58.
St. Farg. & Serv. Ency. Méth. x. 180. 5.
Dahlb. Hym. Europ. i. 47.
Anoplius nobilis, *St. Farg. Hym.* iii. 449. 12.
Pompilus splendidulus, *Fabr. Syst. Piez.* p. 193. 25 ♂.

Hab. Cayenne; Brazil (Para); Venezuela.

190. POMPILUS FLAVIPENNIS.

Calicurgus flavipennis, *St. Farg. Hym.* iii. 407. 14.

Hab. Cayenne.

191. POMPILUS AMERICANUS. B.M.

Pompilus Americanus, *Palis. de Beauv. Ins. Afric. et Amér.* p. 117. t. 3. f. 6.

Pompilus trifasciatus, *Palis. de Beauv. Ins. Afric. et Amér.* p. 118. t. 3. f. 6.

Pompilus plebejus, *Dahlb. Hym. Europ.* i. 60.

Hab. North America.

This species is very closely allied to *P. viaticus*, of which it may be considered the American form; it differs in having the posterior margin of the prothorax angulated, and in the basal segment gradually declining to its base.

192. POMPILUS ATRAMENTARIUS. B.M.

Pompilus atramentarius, *Dahlb. Hym. Europ.* i. 48.

Hab. North America.

193. POMPILUS ATROX.

Pompilus atrox, *Dahlb. Hym. Europ.* i. 63.

Hab. South Carolina.

194. POMPILUS ARCHITECTUS. B.M.

Pompilus (Agenia) architectus, *Say, Bost. Journ.* i. 303. 2 ♀.

Hab. United States (Ohio); Hudson's Bay.

195. POMPILUS APICULATUS. B.M.

Female. Length 4½ lines.—Head, thorax and legs black; the abdomen red; the entire insect covered with a fine white silky pile, most dense on the face, cheeks, coxæ and metathorax; the clypeus rounded at its anterior margin. Thorax: the posterior margin of the prothorax having a band of silvery pile, a spot of the same on each side of the scutellum and post-scutellum; the metathorax rounded, and having a longitudinal slightly impressed line; wings fusco-hyaline, the first recurrent nervure entering the second submarginal cell in the middle, the third submarginal cell subpetiolate; the tibiæ and tarsi have a

few scattered sharp spines, the anterior tarsi ciliated exteriorly; the tarsi obscurely rufo-piceous. Abdomen: the apical ventral segment having an elongate-ovate fuscous spot.

Hab. Mexico (Vera Cruz).

196. POMPILUS ALGIDUS. B.M.

Female. Length 11 lines.—Black: body and legs covered with purple iridescent pile; the face, clypeus, and mandibles in the middle, obscurely ferruginous; the scape and three basal joints of the flagellum ferruginous beneath. Thorax: the posterior margin of the prothorax fusco-ferruginous; wings dark fuscous, with a brilliant violet iridescence; the anterior tibiæ and tarsi strongly ciliated exteriorly, the intermediate and posterior pairs thickly spinose. Abdomen: the base of the second and third segments pale ferruginous, the former obscurely so.

Hab. North America?

197. POMPILUS BIPARTITUS. B.M.

Pompilus bipartitus, *St. Farg. Hym.* iii. 439. 36 ♀.

Hab. North America; Philadelphia.

198. POMPILUS BIGUTTATUS. B.M.

Pompilus biguttatus, *Fabr. Ent. Syst. Supp.* p. 249. 18; *Syst. Piez.* 193. 28.
Say, Bost. Journ. i. 303. 3.

Hab. North America; Nova Scotia.

199. POMPILUS CALIPTERUS.

Pompilus calipterus, *Say, Bost. Journ.* i. 302. 1.

Hab. North America (Indiana).

200. POMPILUS EPHIPPIGER. B.M.

Female. Length 6–8½ lines. — Black: the head thinly sprinkled with black pubescence; the anterior margin of the clypeus emarginate; the posterior margin of the prothorax arcuate; the metathorax rounded, smooth, and having a fine sericeous pile of a purple tint; wings dark fuscous, their apical margins having a darker border; the tibiæ and tarsi spinose. Abdomen: the second and third segments have a broad yellow fascia, the posterior margin of which is emarginate.

Hab. North America.

201. POMPILUS ALIENATUS.

Pompilus fascipennis, *Say, Nar. Exped. St. Peter's River, Append.* p. 67. 1 (nec *Van d. Lind.*).

Hab. N. America (United States).

202. POMPILUS FERRUGINEUS. B.M.

Pompilus ferrugineus, *Dahlb. Hym. Europ.* i. 63.

Hab. North America; St. John's Bluff; East Florida; Georgia.

203. POMPILUS FULVIPES.

Agenia fulvipes, *Dahlb. Hym. Europ.* i. 92.

Hab. Pennsylvania; South Carolina.

204. POMPILUS FUNEREUS. B.M.

Anoplius funereus, *St. Farg. Hym.* iii. 449. 13.

Hab. North America; Philadelphia; St. John's Bluff; East Florida; Hudson's Bay.

205. POMPILUS LEPIDUS. B.M.

Pompilus lepidus, *Say, Bost. Journ.* i. 303. 4.
Pompilus medius, *St. Farg. Hym.* iii. 423. 10?

Hab. N. America; Canada.

206. POMPILUS MELLIPES.

Pompilus mellipes, *Say, Bost. Journ.* i. 304. 7.

Hab. N. America (Indiana).

207. POMPILUS MACULIPENNIS. B.M.

Female. Length 8 lines.—Black: the tips of the mandibles ferruginous; the head and thorax covered with very short velvety pubescence; wings brown, with a purple iridescence, the anterior wings having a large ovate yellow macula a little beyond the middle, touching their anterior margin; the anterior and intermediate tibiæ and tarsi slightly spinose, the posterior tibiæ serrated exteriorly, the tarsi spinose. Abdomen obscurely sericeous, the apical margins of the segments without pile, smooth and shining.

Hab. North America.

208. POMPILUS MARGINATUS.

Pompilus marginatus, *Say, Nar. Exped. St. Peter's River, Append.* p. 67. 2.

Hab. North America (Missouri).

209. POMPILUS NEBULOSUS. B.M.

Pompilus nebulosus, *Dahlb. Hym. Europ.* i. 48.
Pompilus Philadelphicus, *St. Farg. Hym.* iii. 423. 9.
Pompilus atroviolaceus, *Harris, Cat.*

Hab. N. America; Philadelphia; St. John's Bluff; East Florida. (E. Doubleday.)

210. POMPILUS PETIOLATUS. B.M.

Pompilus petiolatus, *Say, Bost. Journ.* i. 305. 9.

Hab. North America.

211. POMPILUS PALLIDICORNIS. B.M.

Female. Length 8 lines.—Black: the antennæ pale yellow, the scape and basal joint of the flagellum black; the posterior margin of the prothorax angular; the metathorax rounded behind and transversely striated; wings dark brown with a violet iridescence, having a large pale yellow irregularly-formed macula on the anterior pair near their apex, the macula the same width as the marginal cell from which it emanates; legs thickly spinose, the posterior tibiæ serrated. Abdomen covered with a fine sericeous pile, which has a violet iridescence.

Hab. St. John's Bluff; East Florida.

212. POMPILUS 5-NOTATUS. B.M.

Pompilus 5-notatus, *Say, Bost. Journ.* i. 304. 5.

Hab. N. America (Indiana); Hudson's Bay; Nova Scotia.

213. POMPILUS SORDIDUS. B.M.

Pompilus fuscipennis, *St. Farg. Hym.* iii. 434. 29, nec *Say.*

Hab. North America; Philadelphia; East Florida.

214. POMPILUS TROPICUS. B.M.

Sphex tropica, *Linn. Syst. Nat.* i. 945. 27.
Fabr. Ent. Syst. ii. 250. 23.
Pompilus tropicus, *Fabr. Ent. Syst. Supp.* p. 250. 23; *Syst. Piez.* p. 194. 33.
St. Farg. & Serv. Ency. Méth. x. 181. 11.
Dahlb. Hym. Europ. p. 62.
St. Farg. Hym. iii. 434. 28.

Hab. N. America; St. John's Bluff; East Florida.

215. POMPILUS AUSTRALIS.

Pompilus Australis, *Guér. Voy. Coq. Zool.* pt. 2. p. 260.

Hab. New Holland; Port Jackson.

216. POMPILUS AURIFRONS. B.M.

Female. Length 12 lines.—Black: the face covered with fine short golden pubescence; the antennæ, clypeus, palpi and mandibles reddish-yellow, the tips of the femora, tibiæ, tarsi and wings of the same colour; the first recurrent nervure entering the second submarginal cell at one-third from its apex; the apical margins of the wings have a narrow fuscous border; the thorax clothed above with short black velvety pubescence; metathorax short, truncate, and transversely rugose-striate, the striation strongest at the sides; the posterior tibiæ strongly serrated exteriorly, the anterior pairs spinose. Abdomen: the first segment and basal half of the second black, with very short black pubescence, the apical half of the second and the whole of the following segments clothed with short golden pubescence; beneath smooth and shining, the margins of the segments rufo-piceous.

Hab. Australia.

217. POMPILUS ANTENNALIS. B.M.

Male. Length 6 lines.—Black: the antennæ orange-yellow above, fuscous beneath, the scape black; a narrow cream-coloured line at the inner orbits of the eyes, not extending to their vertex; the head has a thinly scattered griseous pubescence intermixed with fuscous on the vertex. Thorax: beneath, the sides, as well as the legs have a short hoary pile; the tibiæ have the spurs at their apex white; wings fuscous, irregularly clouded, their apical margins having a dark border; the metathorax short, truncate

behind. Abdomen sessile, the apical margins of the segments having a narrow fascia of fine white pubescence.

Hab. Australia (Adelaide).

218. POMPILUS CARBONARIUS. B.M.

Female. Length 4 lines.—Black, smooth, and impunctate; the abdomen glossy black; the face covered with short silvery pubescence; the legs and sides of the thorax thinly covered with hoary pile; the metathorax rounded; wings fusco-hyaline, the nervures black, the apical segment slightly roughened and sprinkled with long hairs, the extreme apex rufo-piceous.

Hab. New Zealand.

219. POMPILUS CINEREUS. B.M.

Sphex cinerea, *Fabr. Ent. Syst.* ii. 213. 61.

Pompilus cinereus, *Fabr. Ent. Syst. Supp.* p. 250. 22; *Syst. Piez.* p. 194. 31.

Hab. New Holland.

220. POMPILUS COLLARIS. B.M.

Sphex collaris, *Fabr. Ent. Syst.* ii. 208. 40; *Mus. Dom. Banks.*

Pompilus collaris, *Fabr. Syst. Piez.* p. 188. 2.

Hab. New Holland.

221. POMPILUS ERYTHROSTETHUS. B.M.

Female. Length 5½ lines.—The head, legs and abdomen black, the latter very smooth and shining; the thorax blood-red, finely shagreened, the metathorax rounded and more coarsely rugose; the anterior tibiæ ferruginous at the base, the tarsi having exteriorly a row of long cilia; the intermediate and posterior tibiæ and tarsi thickly spinose; wings hyaline, having a transverse fuscous fascia on the anterior wings, crossing at the base of the first and second discoidal cells, enclosing the transverso-medial nervure; fuscous beyond the first submarginal cell; the apex of the posterior wings fuscous; the basal margins of the abdominal segments covered with fine silvery pile.

Hab. New Holland.

222. POMPILUS FASCIATUS. B.M.

Sphex fasciata, *Fabr. Ent. Syst.* ii. 213. 60.
Pompilus fasciatus, *Fabr. Syst. Piez.* p. 194. 30, *& Mus. Dom. Banks.*

Hab. New Holland (Moreton Bay, Hunter River, Port Essington); Van Diemen's Land.

223. POMPILUS FUGAX. B.M.

Sphex fugax, *Fabr. Ent. Syst.* ii. 213. 63.
Pompilus fugax, *Fabr. Ent. Syst. Supp.* p. 250. 24; *Syst. Piez.* p. 194. 35, *& Cab. Dom. Banks.*
Sphex nitida, *Fabr. Ent. Syst.* ii. 214. 65.
Pompilus nitidus, *Fabr. Ent. Syst. Supp.* p. 250. 26; *Syst. Piez.* p. 195. 36, *& Cab. Dom. Banks.*

Hab. New Zealand; New Holland?

On comparison, these insects in the Banksian Collection will be found to be the same; the fascia on the wings appears to be most frequent in the males, but in this species it is a very inconstant character, being frequently obsolete; the locality of New Holland given by Fabricius is possibly erroneous.

224. POMPILUS FRONTALIS.

Sphex frontalis, *Fabr. Ent. Syst.* ii. 209. 41; *Mus. Dom. Banks.*
Pompilus frontalis, *Fabr. Syst. Piez.* p. 188. 3.

Hab. New Holland.

225. POMPILUS FLAVICORNIS. B.M.

Female. Length 10 lines.—Black: the antennæ yellow, two or three of the apical joints fuscous. Thorax oblong-quadrate, of the same width as the head, the sides nearly parallel, the metathorax rounded posteriorly and transversely rugose-striate, and having a longitudinal impressed line down the middle; the prothorax, mesothorax and scutellum smooth; wings dark fuscous, the third submarginal cell one-third wider than the second, which receives the first recurrent nervure about one-third from its apex; legs scarcely spinose, having only a few very short spines on the tibiæ, the tarsi being ciliated with short distant spines. Abdomen smooth, subopake, slightly shining at the base.

Hab. New Holland (Port Stephen).

226. POMPILUS LUNATUS. B.M.

Female. Length 8½ lines.—Black, adorned with a changeable silvery pile, very dense on the body and legs beneath, also on the clypeus, pro- and meta-thorax, as well as on the apical margins of the segments of the abdomen laterally; the head of the same width as the thorax, the vertex transverse-quadrate. Thorax oblong, slightly rounded at the collar, and abruptly truncate posteriorly; the truncation, as well as the entire thorax above, smooth; the metathorax slightly roughened at the margin of the truncation; wings fuscous, the anterior pair having a slightly irregular half-moon-shaped yellow spot at their apex, nearly occupying their entire width; at the base of the wings are a few narrow hyaline streaks. Abdomen sessile, elongate-ovate, pointed at the apex; the legs shorter and stouter than is usual in this genus, and thickly set with stout spines exteriorly.

Hab. New Holland (Sydney).

227. POMPILUS MORIO. B.M.

Sphex morio, *Fabr. Ent. Syst.* ii. 208. 39; *Syst. Piez.* p. 187. 1, *& Mus. Dom. Banks.*

Hab. New Holland.

228. POMPILUS MONACHUS. B.M.

Pompilus monachus, *White, Zool. Erebus and Terror, Faun. New Zeal.*

Female Length 6½–9 lines.—Jet-black: shining, head and thorax thinly scattered over with black pubescence; wings smoky-hyaline, splendidly iridescent, the third submarginal cell elongate, widest at its apex, twice the width of the second cell.

Hab. New Zealand.

229. POMPILUS NUBILIPENNIS. B.M.

Female. Length 5 lines.—Black: the face below the insertion of the antennæ covered with fine short cinereous pubescence; the sides of the thorax and the entire insect beneath, the legs and sides of the metathorax, covered with fine cinereous pile; the metathorax rounded behind, and having a longitudinal impressed line in the middle; wings subhyaline, irregularly clouded with fuscous, leaving a variety of subhyaline spaces; the intermediate and posterior tibiæ strongly serrated exteriorly, the calcaria pale testaceous. Abdomen subsessile, the

apical margins of the segments having narrow fasciæ of white pubescence.

Hab. New Holland.

230. POMPILUS ORNATIPENNIS. B.M.

Female. Length 8 lines.—Black: the antennæ, palpi, and mandibles in the middle ferruginous, the scape fuscous above; the legs ferruginous, coxæ fuscous; wings yellow, their apical margins having a fuscous stripe uniting with a transverse band which emanates from the marginal cell, a fuscous oblong stain occupies the apex of the interno-medial and base of the first discoidal cell; metathorax short and rounded, transversely striated posteriorly; the first segment and basal half of the second segment of the abdomen ferruginous.

Hab. New Holland.

231. POMPILUS PELTERII. B.M.

Pompilus Pelterii, *Guér. Voy. Coq. Zool.* pt. 2. p. 257; *Atlas, Ins.* no. 9. f. 2.

Hab. Amboyna.

232. POMPILUS PICTIFRONS. B.M.

Male. Length 5-6 lines.—Black: an abbreviated line at the inner orbits of the eyes, not extending to their vertex, the maxillary palpi, mandibles in the middle, a line on each side of the labrum, a spot above, and the clypeus, yellow, the latter having a black bell-shaped spot in the centre; a minute yellow spot on the scape, the flagellum bright fulvous beneath, the tibiæ, tarsi, and tips of the femora bright fulvous; wings subhyaline, tinged with yellow, having a pale transverse fuscous fascia on the superior pair, crossing from, but not so wide as, the marginal cell; the apical margins of the wings have a narrow fuscous cloud, the nervures ferruginous, towards the apex of the wings they become fuscous; the metathorax rounded behind and slightly roughened.

Hab. Australia (Adelaide).

233. POMPILUS PICTIPENNIS. B.M.

Female. Length 8 lines.—Black, covered with a fine sericeous silvery pile; the antennæ ferruginous, the scape and two or three of the apical joints above more or less fuscous; the tibiæ and tarsi ferruginous, the claws rufo-piceous; wings sub-

hyaline, the anterior pair having an irregular dark fascia crossing at the transverso-medial nervure; a second broader fascia crosses the wing at the stigma, enclosing the second submarginal cell; the apical margins of the wings have a paler narrow stripe which unites with the second transverse fascia, the enclosed spaces on each side of the second fascia yellow; the metathorax rounded behind, having a central longitudinal impressed line, the posterior lateral angles subtuberculate, and the apical portion of the metathorax transversely striated. Abdomen smooth and shining, beautifully adorned with changeable silvery pile, which is most dense at the basal margins of the segments.

Hab. New Holland.

234. POMPILUS SEMILUCTUOSUS. B.M.

Female. Length 6-8 lines.—Black: the head behind, the face, mandibles towards their base, and the sides of the clypeus, covered with a short cinereous pile; the coxæ and femora beneath, the anterior tibiæ behind, and the intermediate and posterior tibiæ at their base and apex above, covered with short cinereous pile; a spot at the base of the abdomen and the apical margins of the segments have a fascia of the same colour; the posterior margin of the prothorax having a narrow band, a transverse line at the base of the scutellum, a spot on each side of the latter, another on each side of the post-scutellum, a spot on each side of the base of the metathorax, a waved stripe on each side of its apex, of cinereous pile; the sides of the thorax irregularly spotted with similar pile; wings fuscous, their apical margins having a darker border; the second submarginal cell receiving the first recurrent nervure near its apex, the third submarginal cell much narrowed towards the marginal cell; the tibiæ having a few scattered spines exteriorly, the anterior tarsi furnished with a row of long cilia behind.

Hab. New Holland.

235. POMPILUS TUBERCULATUS. B.M.

Female. Length 12 lines.—Black: the head, antennæ, tibiæ, tarsi, and tips of the femora, orange-yellow; the palpi, labrum and mandibles yellow, tips of the mandibles black. Thorax covered with a short velvety black pubescence, the scutellum compressed, the post-scutellum elevated, forming a conical tubercle; the metathorax rounded and transversely rugose towards the apex, the intermediate and posterior tibiæ serrated; wings yellow, their apical margins having a narrow dark border, their extreme base

black. Abdomen yellow, the basal segment black, sometimes the base of the second black.

Hab. New Holland (Houtman's Abrolhos, W. Coast).

236. POMPILUS VIDUATUS.

Female. Length 6–7 lines. — Black: the face with a fine short cinereous pubescence, the vertex impunctate, the cheeks with long cinereous pubescence. Thorax smooth, slightly shining; the metathorax opake, truncate behind; the sides of the thorax and the legs have a changeable hoary pile; the intermediate and posterior tibiæ thickly set with short stout spines, the calcaria white; wings fusco-hyaline, irregularly clouded, the nervures fuscous. Abdomen sessile, the apical margins of the segments have narrow fasciæ of fine white pubescence.

Hab. New Holland.

Genus 2. CTENOCERUS.

Ctenocerus, *Dahlb. Hym. Europ.* i. 456. 23-24 (1843).
Clavelia, *Lucas, Ann. Soc. Ent. Fr.* new ser. (1852).

1. CTENOCERUS KLUGII. B.M.

Ctenocerus Klugii, *Dahlb. Hym. Europ.* i. 456. 23-24 ♂.
Clavelia pompiliformis, *Lucas, Ann. Soc. Ent. Fr.* new ser. (1852).

Hab. Algeria.

Genus 3. FERREOLA.

Sphex, pt., *Fabr. Ent. Syst.* ii. 209 (1793).
Pompilus, pt., *Fabr. Syst. Piez.* p. 188 (1804).
Salius, *Dahlb. Hym. Europ.* i. 441 (1843).
Ferreola, *St. Farg. Hym.* iii. 468 (1845).

This can only be regarded as a subgenus, established by St. Fargeau for the reception of the *Pompilus dimidiatus* of Fabricius; the species included in it have the antennæ short, thickened, and gradually tapering to a point; the head narrower than the thorax, the prothorax longer than in *Pompilus*, in the males nearly as long as the meso- and meta-thorax combined; the abdomen sessile and as wide as the thorax.

The genus *Salius* of Fabricius appears to be founded on the male of an ordinary *Pompilus*, but between it and its female

there exists a remarkable disparity; specimens believed to be male and female have been received from Albania, and also from Portugal. Dahlbom has placed the species included in the genus *Ferreola* in that of *Salius*, the true species of *Salius* being apparently removed into a new genus, *Homotus*.

The species of the extensive genus *Pompilus* present so many phases of difference, that without types of every described species, it becomes impossible in a catalogue to arrange them in any more satisfactory order than that of locality; in arranging those belonging to the fauna of any particular country, the armature of the legs appears to afford the most constant character, and is one especially desirable, since it is a clue to habit.

1. FERREOLA DIMIDIATA. B.M.

Sphex dimidiata, *Fabr. Ent. Syst.* ii. 209. 45.
Pompilus dimidiatus, *Fabr. Syst. Piez.* p. 189. 10.
Van d. Lind. Hym. d'Eur. 322. 17.
Ferreola Algira, *St. Farg. Hym.* iii. 468. 1. t. 36. f. 1 ♀.
Lucas, Explo. Sc. Algér. iii. 269. t. 14. f. 4.

Hab. Algeria; Barbary.

2. FERREOLA HUMBOLDTI.

Salius Humboldti, *Dahlb. Hym. Europ.* i. 441.

Hab. Egypt.

3. FERREOLA SCHIÖDTEI. B.M.

Salius Schiödtei, *Dahlb. Hym. Europ.* i. 441.

Hab. Egypt; Cape of Good Hope; Port Natal.

4. FERREOLA BICOLOR. B.M.

Female. Length 7 lines.—Head, prothorax, mesothorax, scutellum and tegulæ ferruginous; the face fuscous; the metathorax truncate, deeply excavated, and receiving the base of the abdomen; the legs, metathorax and abdomen cyaneous; wings deep fuscous, the third submarginal cell much narrowed towards the marginal.

Hab. Port Natal.

This species closely resembles *F. Schiödtei*, but the prothorax is longer and the metathorax much more deeply excavated.

5. FERREOLA COLLARIS. B.M.

Sphex collaris, *Fabr. Ent. Syst.* ii. 208. 40, *& Mus. Dom. Banks.*
Pompilus collaris, *Fabr. Syst. Piez.* p. 188. 2.
Salius collaris, *Dahlb. Hym. Europ.* i. 441.

Hab. Australia.

6. FERREOLA FRONTALIS.

Sphex frontalis, *Fabr. Ent. Syst.* ii. 209. 41.
Pompilus frontalis, *Fabr. Syst. Piez.* p. 188. 3, *& Mus. Dom. Banks.*

Hab. Australia.

7. FERREOLA DISTINCTA. B.M.

Female. Length 10 lines.—Black, covered with iridescent pile, which has a mixture of violet and blue shades; the metathorax sanguineous, truncate, and having a central longitudinal impressed line; the legs spinose; the wings dark fuscous; the third submarginal cell a little wider than the second and slightly narrowed towards the marginal.

Var. β. A sanguineous spot on each side of the first and second segments of the abdomen, those on the second largest.

Hab. Albania.

8. FERREOLA FASCIATA.

Male. Length 5 lines.—Black: the metathorax has a central longitudinal impressed line, and is covered with short silvery pubescence; truncate posteriorly; wings subhyaline, the neuration as in *F. distincta*; the second segment of the abdomen has a broad red fascia which is covered with silvery pile; legs slightly spinose.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

Notwithstanding the difference in the colour of the wings, there are strong reasons for suspecting this species to be the male of *F. distincta*.

9. FERREOLA FENESTRATA. B.M.

Female. Length 6 lines.—Black: a narrow pale testaceous line along the orbits of the eyes, slightly interrupted at their vertex. The thorax and legs with a fine sericeous silvery pile; the prothorax ferruginous; wings dark fuscous, with a violet iridescence; their base, to the extent of one-third of their length, clear hyaline. Abdomen covered with a violet iridescent pile.

Male.—Resembles the female, but has the prothorax proportionably longer, nearly equal to the length of the meso- and meta-thorax; the abdomen has the basal half of its segments covered with a grey or silvery pile, the apical half with violet.

Hab. India (Madras).

10. FERREOLA UNICOLOR. B.M.

Female. Length 6½ lines.—Black: prothorax twice the length of the mesothorax; the metathorax truncate posteriorly and slightly excavated; wings dark fuscous, the third submarginal cell much narrowed towards the marginal; the legs spinose. Abdomen sessile, and having, as well as the thorax, an obscure violet bloom or pile.

Hab. South America (Napo River).

11. FERREOLA SANGUINEA. B.M.

Female. Length 9 lines.—Thorax and abdomen ferruginous; head, antennæ, legs, and three apical segments of the abdomen, black; the scape of the antennæ ferruginous beneath; wings dark fuscous, the third submarginal cell narrowed towards the marginal, of the same width as the second submarginal; the legs spinose.

Hab. Georgia.

Genus 4. MAURILLUS.

Head quadrate, wider than the thorax; eyes elongate-ovate; mandibles short, stout and bidentate, the inner tooth minute; clypeus transverse, truncated anteriorly; antennæ short and convolute; the scape short, very thick, and obliquely truncate at the apex; ocelli three, placed forward on the vertex. Thorax oblong, its sides parallel, rounded anteriorly and truncated posteriorly; the anterior wings having one marginal and three submarginal cells, the second and third of equal width, the former receiving the first recurrent nervure a little beyond the middle; the legs short and spinose. Abdomen wider than the thorax, sessile, the base truncated, with the lateral angles rounded.

1. MAURILLUS AUSTRALIS. B.M.

Female. Length 9 lines.—Black: head quadrate, the vertex densely clothed with golden pubescence; a smooth shining naked space above the insertion of the antennæ, which are placed in

deep fossulets on each side of the face; the fossulets, as well as the clypeus, adorned with bright silvery pile. The thorax and abdomen are covered with a short changeable pubescence, having in some lights shades of purple and violet, in others appearing black; the posterior margin of the prothorax arcuate; the sides of the metathorax laterally, and the truncation, rugose; the lateral posterior angles have a spot of white pubescence; wings dark fuscous, with a transverse subhyaline stripe near their apex. Abdomen: a lateral ovate spot of silvery-white pubescence near the apical margins of all the segments; there is also a spot on the segments laterally, beneath.

Hab. North-west Coast of Australia.

Genus 5. SALIUS.

Salius, *Fabr. Syst. Piez.* p. 124 (1804).

1. SALIUS BICOLOR. B.M.

Salius bicolor, *Fabr. Syst. Piez.* p. 124. 1 ♂.
St. Farg. Hym. iii. 393. 1. t. 31. f. 5 ♀.
Lucas, Explo. Sc. Algér. iii. 267.
Calicurgus scurra, *St. Farg. Hym.* iii. 400. 3?

Female. Length 8 lines.—Black: the vertex, antennæ, and the face on each side above the clypeus, broadly yellow; the prothorax and a spot in the centre of the mesothorax yellow; the tibiæ, tarsi, and tips of the femora reddish-yellow; wings yellow, their tips fuscous; the second segment of the abdomen has an ovate yellow spot on each side, about the middle; the third and fourth segments have on each side, at their base, an oblong macula.

Hab. Algeria; Albania.

The head and prothorax of the ordinary form of *Pompilus*: the mandibles bidentate.

The female described has been received on several occasions together with the *Salius bicolor*, and will in all probability prove to be the female of that insect.

2. SALIUS DISSIMILIS.

Male. Length 8 lines.—Head and antennæ ferruginous, with a black stripe across the vertex enclosing the stemmata; the prothorax, mesothorax, scutellum, post-scutellum, and tegulæ ferruginous; the metathorax and abdomen black; legs black,

the tibiæ, tarsi, and tips of the femora ferruginous; wings yellow, their apical margins having a dark fuscous border. Abdomen immaculate, with an obscure violet bloom.

Hab. Algeria. (Coll. W. W. Saunders, Esq.)

This insect closely resembles *S. bicolor* in every particular, except the markings of the abdomen; but the prothorax is shorter, as well as the metathorax: the bloom on the insect is a good characteristic, of which *S. bicolor* is destitute, being smooth and shining.

3. SALIUS BIDENS.

Salius bidens, *St. Farg. Hym.* iii. 395. 3 ♂.

Hab. The Pyrenees.

Genus 6. NOTOCYPHUS.

Head as wide as the thorax; eyes large, lateral and ovate; ocelli three, in a triangle on the vertex; antennæ convolute at their apex; the clypeus short and transverse; the *labrum elongate and produced.* The prothorax subelongate, the metathorax elongate; the thorax is rounded anteriorly and truncate posteriorly. Wings narrower than in the genus *Pompilus*; the anterior pair having one marginal and three submarginal cells; the second submarginal cell oblique, and receiving the first recurrent nervure *towards its base*; the third submarginal cell about the same length as the second, much narrowed towards the marginal. Abdomen sessile, acuminate at its apex.

1. NOTOCYPHUS SÆVISSIMUS. B.M.

Female. Length 5–8 lines.—Black: the face smooth, elevated before the insertion of the antennæ; a slightly impressed line extends from the verge of the elevation to the anterior ocellus; the anterior margin of the clypeus rounded; the labrum longer than the clypeus, narrowed anteriorly and truncate at the apex. Thorax smooth and subopake, gradually declining from the disk of the mesothorax to the anterior margin of the prothorax and the verge of the truncation of the metathorax; wings dark fuscous; legs without spines, the anterior coxæ elongate. Abdomen slightly compressed, the first, second, fifth and sixth segments pale ferruginous above; sometimes the apical margins of the third and fourth segments are slightly rufo-testa-

ceous; beneath, the segments narrowly rufo-testaceous at their apical margins.

Hab. Brazil (Para and Santarem). (H. W. Bates.)

2. NOTOCYPHUS TYRANNICUS.

Female. Length 11–12 lines.—Black: agreeing in form in every particular with *N. sævissimus*; the labrum elongated and narrowed anteriorly, its apex truncate. Thorax smooth and impunctate; the metathorax truncated, having the verge of the truncation emarginate; wings dark fuscous, with a violet iridescence. Abdomen smooth, slightly shining, its apex acuminate. The entire insect has a covering of obscure pile, which has a slight purple tinge on the metathorax; on the abdomen it is obscure blue.

Hab. Brazil.

3. NOTOCYPHUS RIXOSUS.

Female. Length 7½ lines.—Black: of the same form as the two preceding species; the labrum produced, narrowed towards its apex, which is emarginate; wings dark fuscous; the legs without spines; the metathorax truncate, the truncation slightly concave, its verge emarginate. Abdomen: the second segment has on each side a large cream-coloured spot, the spots nearly meeting on the disk of the segment; the two apical segments white above.

Hab. Brazil.

Genus 7. PLANICEPS.

Pompilus, pt., *Latr. Gen. Cr. et Ins.* iv. 66.
Planiceps, *Latr. Dict. Class. d'Hist. Nat.* (1822).

1. PLANICEPS LATREILLII.

Pompilus planiceps, *Latr. Gen. Cr. et Ins.* iv. 66.
Planiceps Latreillii, *Van d. Lind. Obs.* i. 354.
Dahlb. Hym. Europ. i. 36.
St. Farg. Hym. iii. 391. 1.

Hab. France.

2. PLANICEPS VARIPENNIS. B.M.

Planiceps varipennis, *Perty, Del. An. Art.* p. 143. t. 26. f. 9.
Spin. Gay's Chili, vi. 371. 1; *Atlas*, t. 4. f. 4 ♂ ♀.

Hab. Brazil (Rio Tapajos); Chili (Coquimbo).

3. PLANICEPS LACORDAIRII.

Planiceps Lacordairii, *Guér. Icon. Règ. Anim.* iii. 434.

Hab. Brazil.

4. PLANICEPS VENUSTUS.

Planiceps venustus, *Guér. Icon. Règ. Anim.* iii. 434.
St. Farg. Hym. iii. 392. 2.

Hab. Brazil. (Coll. F. Smith.)

Genus 8. APORUS.

Aporus, *Spin. Ins. Lig.* ii. 34 (1806).
Evagethes, *St. Farg. Hym.* iii. 390 (1845).

1. APORUS UNICOLOR. B.M.

Aporus unicolor, *Spin. Ins. Lig.* ii. 33. 30 ♂.
Van d. Lind. Obs. i. 348. 1.
St. Farg. Hym. iii. 389. 2.
Aporus bicolor, *Spin. Ins. Lig.* ii. 34. 431 ♀.
Latr. Gen. Cr. et Ins. iv. 64.
Van d. Lind. Obs. i. 350. 3.
St. Farg. Hym. iii. 388. 1?
Steph. Ill. Brit. Ent. vii. *Supp.* 13. t. 41. f. 1.

Hab. Britain; France; Italy; Germany.

2. APORUS DUBIUS.

Aporus dubius, *Van d. Lind. Hym.* i. 81. 4 ♂?
Dahlb. Hym. Europ. i. 37. 18? (var. ♂ Pomp. gibbus?).

Hab. Belgium; Prussia.

3. APORUS FEMORALIS.

Aporus femoralis, *Van d. Lind. Hym.* i. 79. 2?
St. Farg. Hym. iii. 389.

Hab. France and Germany.

4. APORUS INERMIS.

Aporus inermis, *Brullé, Expéd. Sc. Morée,* iii. 364?; *Atlas,* t. 50. f. 5.

Hab. The Morea.

5. APORUS MELANURUS.

Pompilus melanurus, *Klug, Symb. Phys.* dec. iv. no. 22. t. 39. f. 10.
Aporus melanurus, *Dahlb. Hym. Europ.* i. 443.
Hab. Arabia.

6. APORUS ARGYRELLUS.

Pompilus argyrellus, *Klug, Symb. Phys.* dec. iv. no. 21. t. 39. f. 9.
Aporus argyrellus, *Dahlb. Hym. Europ.* i. 443.
Hab. Egypt.

7. APORUS GRACILIS.

Pompilus gracilis, *Klug, Symb. Phys.* dec. iv. no. 24. t. 39. f. 12.
Aporus gracilis, *Dahlb. Hym. Europ.* i. 443.
Hab. Egypt.

8. APORUS AMŒNUS.

Pompilus amœnus, *Klug, Symb. Phys.* dec. iv. no. 25. t. 39. f. 13.
Aporus amœnus, *Dahlb. Hym. Europ.* i. 443.
Hab. Egypt.

9. APORUS SERICEUS.

Aporus sericeus, *Spin. Ann. Soc. Ent. Fr.* vii. 462 (1838).
Hab. Africa.

10. APORUS WALTLII.

Aporus Waltlii, *Spin. Ann. Soc. Ent. Fr.* vii. 462 (1838).
Hab. Africa.

11. APORUS CINGULATUS. B.M.

Sphex cingulata, *Fabr. Ent. Syst.* ii. 210. 50.
Pompilus cingulatus, *Fabr. Ent. Syst. Supp.* p. 247. 7.
Liris cingulata, *Fabr. Syst. Piez.* p. 230. 9, *& Mus. Dom. Banks.*
Hab. Australia.

12. APORUS FASCIATUS. B.M.

Male. Length 4 lines.—Black: the face covered with short silvery pubescence, the cheeks and the thorax have a similar clothing, on the pro- and meso-thorax it is very thin, but dense

on the metathorax, sides, coxæ and femora beneath; wings hyaline, their apical margins clouded. Abdomen: the apical margins of the first and three following segments have fasciæ of silvery pubescence; the apical segment pale testaceous.

Hab. United States (Warm Springs, S. Carolina).

Genus 9. PARAPOMPILUS.

Micropteryx, *St. Farg. Hym.* iii. 396 (1845), nec *Hübn.*

The name *Micropteryx* having been used not only for a genus of Lepidoptera, but also for one of Fishes, a new one has been proposed. The species of which this genus is composed at present, have, with one exception, abbreviated wings; this character, however, must be regarded as only of specific value. The genus is characterized by having the head compressed, the face forming an oblique plane, the antennæ inserted in deep fossulets on the anterior part of the face; the prothorax longer than in the true *Pompili*, the metathorax elongate; the wings inserted about the middle of the thorax, the anterior pair having one marginal and three submarginal cells. Abdomen sessile.

1. PARAPOMPILUS BREVIPENNIS. B.M.

Pompilus brevipennis, *Fabr. Syst. Piez.* p. 200. 63.
Micropteryx brevipennis, *St. Farg. Hym.* iii. 396. 1. t. 32. f. 1 ♀.
Lucas, Explo. Sc. Algér. iii. 277.

Hab. Barbary; Algeria.

2. PARAPOMPILUS BICOLOR. B.M.

Micropteryx bicolor, *Smith, Ann. & Mag. Nat. Hist.* vii. 2nd ser. p. 29 (1851).

Hab. Algeria.

3. PARAPOMPILUS FASCIATUS. B.M.

Micropteryx fasciata, *Smith, Ann. & Mag. Nat. Hist.* vii. 2nd ser. p. 30 (1851).

Hab. Port Natal; Cape of Good Hope.

4. PARAPOMPILUS NAOMI. B.M.

Female. Length 4–6 lines.—Black: the anterior legs, pro- and meso-thorax covered with very short black velvety pubescence, which in certain lights has a rich purple iridescence; the second segment of the abdomen has a similar clothing, the third segment has two oblique stripes meeting about the middle of the segment; the other parts of the insect, including the legs, densely coated with very short white pubescence; the meta-thorax has on each side of its disk a longitudinal waved carina, extending from the base to the apex; the anterior wings hyaline, with a broad dark fuscous cloud crossing from the marginal cell, being of the same width as that cell, and leaving the apex clear; the wings extending to the apical margin of the second abdominal segment.

Hab. St. Domingo.

Genus 10. CEROPALES.

Evania, pt., *Fabr. Syst. Ent.* p. 345 (1775).
Ichneumon, pt., *Oliv. Ency. Méth.* vii. 209 (1789).
Ceropales, *Latr. Hist. Nat. Crust. et Ins.* xiii. 283 (1805).
Pompilus, pt., *Illig. Ed. Faun. Etrus.* ii. 84. 80.

1. CEROPALES MACULATA. B.M.

Evania maculata, *Fabr. Syst. Ent.* p. 345. 2; *Ent. Syst.* ii. 193. 2.
Rossi, Faun. Etrus. ii. 84. 799.
Sphex rustica, *Müller, Prod. Zool. Dan.* p. 161. 1876.
Ichneumon multicolor, *Fourc. Ent. Par.* ii. 404. 35.
Oliv. Ency. Méth. vii. 209. 17.
Pompilus frontalis, *Panz. Faun. Germ.* 72. 9.
Illig. Faun. Etrus. ii. 84. 799.
Ceropales maculata, *Latr. Hist. Nat. Crust. et Ins.* xiii. 283. 1.
Fabr. Syst. Piez. p. 185. 1.
Panz. Krit. Revis. ii. 112.
Spin. Ins. Lig. ii. 171. 5.
Van d. Lind. Obs. i. 347. 3.
Shuck. Foss. Hym. p. 69. 1.
Dahlb. Hym. Europ. i. 32. 15.
Schiödte, Mon. Pomp. Kröy. Tidsskr. i. 320. 1.
St. Farg. Hym. iii. 465. 1.
Smith, Cat. Brit. Hym. p. 15. 1.

Hab. Britain; France; Germany; Italy; Denmark; Sweden.

2. CEROPALES VARIEGATA. B.M.

Evania variegata, *Fabr. Ent. Syst. Supp.* p. 241.
Panz. Faun. Germ. 77. 10.
Ceropales variegata, *Latr. Hist. Nat. Crust. et Ins.* xiii. 284. 2.
Fabr. Syst. Piez. p. 186. 2.
Spin. Ins. Lig. i. 66. 1.
Van d. Lind. Obs. i. 347. 2.
Shuck. Foss. Hym. p. 71. 2.
Curtis, Brit. Ent. xvi. t. 756.
St. Farg. Hym. iii. 466. 2. t. 33. f. 2.
Dahlb. Hym. Europ. i. 31. 14.
Smith, Cat. Brit. Hym. p. 15. 2.

Hab. Britain; France; Italy; Germany; Sweden.

3. CEROPALES HISTRIO.

Evania histrio, *Fabr. Ent. Syst. Supp.* p. 241. 2.
Evania albicincta, *Rossi, Faun. Etrus.* ii. 84. 800.
Ceropales histrio, *Fabr. Syst. Piez.* p. 186. 3.
Spin. Ins. Lig. i. 66. 2.
Van d. Lind. Hym. i. 76. 1.
Dahlb. Hym. Europ. i. 33. 16.
Pompilus festivus, *Panz. Faun. Germ.* 106. 12.
Pompilus histrio, *Illig. Ed. Faun. Etrus.* ii. 84. 800.

Hab. Germany; France; Belgium; Italy.

4. CEROPALES FASCIATA.

Ichneumon fasciator, *Fabr. Spec. Ins.* i. 430. 60; *Mant.* i. 265. 72.
Evania fasciata, *Fabr. Ent. Syst.* ii. 193. 3.
Ceropales fasciata, *Fabr. Syst. Piez.* p. 186. 4.
Spin. Ins. Lig. ii. 171. 6.
Van d. Lind. Obs. i. 347. 4.
St. Farg. Hym. iii. 467. 4.

Hab. Italy.

5. CEROPALES FLAVO-PICTA.

Male. Length 6 lines.—Head yellow, having a ferruginous stain on the vertex and a fuscous spot before the ocelli; the antennæ ferruginous, their apex fuscous above; tips of the mandibles ferruginous. Thorax: beneath, and also the sides, black; above reddish-yellow; the anterior margin of the prothorax, and a stripe passing over the tegulæ, fuscous; the lateral margins of the metathorax fuscous; wings yellow, their extreme apex

slightly fuscous; the legs pale ferruginous, the coxæ and trochanters fuscous. Abdomen reddish-yellow, the apical margins of the segments having rufo-fuscous fasciæ.

Hab. India. (Coll. W. W. Saunders, Esq.)

6. CEROPALES FUSCIPENNIS.

Female. Length 4 lines.—Black: the orbits of the eyes, slightly interrupted at their vertex, the clypeus, mandibles, and scape in front, yellow; the basal half of the flagellum fulvous beneath. Thorax: the prothorax above, the tegulæ and legs ferruginous; the coxæ and trochanters black, the apical joints of the intermediate and posterior tarsi fuscous; wings subfuscous, nervures fuscous. Abdomen ferruginous, the basal segment black.

Hab. India. (Coll. W. W. Saunders, Esq.)

7. CEROPALES ORNATA.

Female. Length 3½ lines.—Head yellow, with a transverse fuscous line on the vertex. Thorax yellow, the mesothorax and base of the metathorax black, or fuscous; the former has a yellow spot in the middle; the legs yellow, variegated with ferruginous stains; the wings fusco-hyaline. Abdomen yellow, the basal margins of the segments ferruginous; beneath, pale ferruginous, sometimes the basal margins are fuscous, in other examples fusco-ferruginous.

Hab. India. (Coll. W. W. Saunders, Esq.)

8. CEROPALES PICTA.

Ceropales picta, *Shuck. Trans. Ent. Soc. Lond.* ii. 70. 1 ♀.

Hab. Cape of Good Hope. (Coll. F. Smith.)

9. CEROPALES CHILENSIS.

Ceropales Chilensis, *Spin. Gay's Chili*, vi. 391. 1.

Hab. Chili.

10. CEROPALES ANOMALIPES.

Ceropales anomalipes, *Shuck. Trans. Ent. Soc. Lond.* ii. 70. 2.

Hab. Brazil. (Coll. F. Smith.)

11. CEROPALES LONGIPES. B.M.

Female. Length 4 lines.—Black: head wider than the thorax; eyes slightly emarginate at their inner orbits; the clypeus, a

spot above, the labrum, mandibles, and orbits of the eyes, pale yellow, the latter interrupted at the vertex; the scape yellow in front. Thorax: the posterior margin of the prothorax, a spot on the scutellum and post-scutellum, another on the posterior angles of the metathorax, the tubercles, a spot on each side of the pectus, and the coxæ in front, yellow; the legs pale ferruginous, the posterior pair full twice the length of the body; wings hyaline. Abdomen: a spot on each side of the first segment, a waved transverse line on the second, third and fourth, which is slightly interrupted in the middle of the first two, and which at the extreme lateral margins expands into an ovate shape, yellow; the fifth segment has a large subquadrate spot in the middle, and the apical segment entirely yellow; beneath immaculate.

Hab. Georgia.

12. CEROPALES BIPUNCTATA. B.M.

Ceropales bipunctata, *Say, Nar. Exped. St. Peter's River, Append.* p. 69. 3.

Hab. United States.

13. CEROPALES FERRUGINEA.

Ceropales ferruginea, *Say, Nar. Exped. St. Peter's River, Append.* p. 68. 2.

Hab. N. America (United States).

14. CEROPALES INTERRUPTA.

Ceropales interrupta, *Say, Bost. Journ.* i. 365. 1.

Hab. N. America (Indiana).

15. CEROPALES FRIGIDA.

Ceropales fasciata, *Say, Nar. Exped. St. Peter's River, Append.* p. 68. 1 (nec *Fabr.*).

Hab. N. America (Missouri).

16. CEROPALES APICALIS. B.M.

Ceropales apicalis, *Say, Bost. Journ.* i. 366. 2.

Hab. N. America (Indiana); St. John's Bluff; East Florida.

17. CEROPALES FRATERNA.

Female. Length 4 lines.—Black: the inner orbits of the

eyes, the clypeus, labrum, a spot on the scape in front, and a minute spot above their insertion, yellowish-white; a narrow line of the same colour behind the eyes, not reaching their vertex. Thorax: the posterior margin of the prothorax, the scutellum, the posterior angles of the metathorax, the tubercles, the anterior and intermediate coxæ in front, a spot on each side of the pectus, a line at the sides of the posterior coxæ externally, and their apex beneath, yellowish-white; the tibiæ and tarsi ferruginous; the tibiæ dark fuscous above; a yellow spot at the apex of the anterior and intermediate pair beneath; wings hyaline. Abdomen: a slightly interrupted waved fascia crossing the basal segment in the middle, and an entire one on the apical margins of the following segments, yellow; the apical one entirely so.

Hab. United States. (Coll. W. W. Saunders, Esq.)

This insect bears a very close resemblance to the *C. maculata* of Europe.

Genus 11. MACROMERIS.

Macromeris, *St. Farg. Guérin's Mag. Zool.* pl. 29 (1831).
St. Farg. Hym. iii. 463 (1845).

1. MACROMERIS SPLENDIDA. B.M.

Macromeris splendida, *St. Farg. Guérin's Mag. Zool.* (1831) pl. 29. f. 1; *Hym.* iii. 463. 1. t. 32. f. 5 ♂.

Hab. Java; India; China.

2. MACROMERIS VIOLACEA. B.M.

Macromeris violacea, *St. Farg. Guérin's Mag. Zool.* pl. 30. f. 1 ♂; *Hym.* iii. 464. 2.

Hab. New Guinea; Assam.

Genus 12. MYGNIMIA.

Priocnemis, pt., *Dahlb. Hym. Europ.* i. (1843).
Hemipepsis, pt., *Dahlb. Hym. Europ.* i. (1843).
Pompilus, pt., *St. Farg. Hym.* iii. 430 (1845).
Pallosoma, *St. Farg. Hym.* iii. 492 (1845).

The genus *Mygnimia* is proposed for that group of *Pompilidæ* which have the neuration of the anterior wings as given below; the characters of the various genera of the authors quoted, when applied to large groups of *Pompili* from various countries, will be found to merge into each other by almost imperceptible de-

grees of affinity. The present genus is restricted to those species which embrace the characters subjoined.

The superior wings having one elongate marginal cell and three submarginal cells; the first recurrent nervure uniting with the second transverso-cubital nervure; the second recurrent nervure entering the second submarginal cell about one-third from its base; the legs strongly serrate or spinose, the claws having a tooth beneath more or less developed, in some species as stout as the claws themselves.

1. MYGNIMIA SEVERA.

Sphex severus, *Drury, Ill. Exot. Ins.* iii. t. 42. f. 4.

Hab. India. (Coll. W. W. Saunders, Esq.)

2. MYGNIMIA FLAVA. B.M.

Sphex flava, *Fabr. Ent. Syst.* ii. 217. 80.
Pompilus flavus, *Fabr. Syst. Piez.* p. 197. 52.
St. Farg. Hym. iii. 430. 21.
Hemipepsis flava, *Dahlb. Hym. Europ.* i. 123. 1.

Hab. India.

3. MYGNIMIA AUREOSERICEA.

Pompilus aureosericeus, *Guér. Voy. Coq. Zool.* pt. 2. p. 256.

Hab. Java. (Coll. W. W. Saunders, Esq.)

4. MYGNIMIA AUDAX. B.M.

Female. Length 15-20 lines.—Ferruginous brown, the clypeus, scape in front, and flagellum beneath, ferruginous; the mandibles and clypeus are covered with short yellowish pubescence, the clypeus has a few long black hairs; the sutures of the parts of the thorax are more or less fuscous; the metathorax transversely rugose-striate, convex in the middle, the lateral margins rounded and raised; wings fulvous-red, nervures ferruginous, the costal nervure fuscous; the wings are rather paler towards their apical margins, which are narrowly and slightly fuscous; an ocellus at the base of the second discoidal cell; the tibiæ on their outer margins, and the tarsi, strongly ciliated; the posterior tibiæ flattened, longitudinally grooved above; the apical margins of the abdominal segments have a fuscous band, which is continued beneath.

Hab. Silhet.

5. MYGNIMIA ANTHRACINA. B.M.

Male. Length 13 lines.—Intensely black: the head and thorax clothed with black pubescence, the metathorax transversely sulcate; the wings have the basal half, the apical margins, and the inferior margin of the posterior pair, dark brown, the intervening space fusco-hyaline and covered with a fine short white pubescence, which in different lights exhibits different degrees of whiteness, having in some positions a bright silvery lustre; legs elongate; the abdomen slightly glossy and thinly covered with fine short black pubescence.

Hab. Java; Sumatra.

6. MYGNIMIA ALBIPLAGIATA. B.M.

Female. Length 13 lines.—Black: the head covered with short black pubescence and having a number of long scattered black hairs; the anterior margin of the clypeus, the middle of the mandibles, the inner orbits of the eyes, and a transverse line in front of the anterior stemma, touching the eyes, obscurely rufo-testaceous. Thorax clothed with a similar pubescence to that on the head, and having a large kite-shaped spot of short snow-white pubescence on the disk; the wings dark fuscous, iridescent, and irregularly maculated with darker shades; legs elongate, the tibiæ, tarsi, and tips of the femora ferruginous. Abdomen smooth and shining, with a few long black hairs at the apex.

Hab. Java.

7. MYGNIMIA ATROX. B.M.

Male. Length 6–7 lines.—Black, opake; the flagellum beneath, the palpi, labrum and mandibles, ferruginous; the tips of the latter black; the flagellum fuscous above. Thorax: very sparingly pubescent on the pro- and meta-thorax, the latter convex above and transversely striate; wings very dark fuscous, with a coppery iridescence; the anterior femora, the apex of the intermediate and posterior pairs, and the tibiæ and tarsi, pale ferruginous. Abdomen: the second and third segments having, particularly towards their base, a changeable iridescent pile, which in certain lights has a somewhat golden lustre, but very obscure, the apex fusco-ferruginous.

Hab. N. China. (Coll. R. Fortune.)

8. MYGNIMIA ÆRUGINOSA. B.M.

Female. Length 9 lines.—Head, antennæ, palpi and mandibles, rusty-red; the posterior margin of the prothorax and the legs also of a rusty-red, an obscure spot of the same tint on the disk of the mesothorax and scutellum; the metathorax convex, transversely striated; the coxæ fuscous; wings fuscous with a violet iridescence, the second discoidal cell having a hyaline spot at its base. Abdomen fuscous, having the apical margin of the first segment narrowly, that of the second broadly, and the whole of the following segments rusty-red.

Hab. Sumatra.

9. MYGNIMIA COMBUSTA. B.M.

Female. Length 12-13 lines. — Head, thorax and legs of a rusty-red; the antennæ, palpi and mandibles of the same colour, the latter black at their tips; the mesothorax has on each side an oblong fuscous stain, the metathorax convex and finely transverse-striate; wings dark fuscous, obscurely iridescent, their base rusty-red, and having a subhyaline spot at the base of the second discoidal cell, and also a transverse line near the apex of the first submarginal cell. Abdomen black, subopake.

Male.—Rather smaller than the female, but of the same colour; the flagellum fuscous above towards the apex, and the metathorax much more deeply striated, the abdomen being subclavate.

Hab. Congo.

10. MYGNIMIA FENESTRATA. B.M.

Male. Length 10-11 lines.—Fusco-ferruginous: the antennæ beneath, the face, palpi and mandibles rufo-testaceous, the tips of the latter black; the thorax, and legs beneath, pale ferruginous; wings dark brown with a purple iridescence, at the base of the second discoidal cell an ovate hyaline spot; the anterior margin of the first submarginal cell subhyaline, in some examples obscurely so; the mesothorax has a black stripe on each side; the scutellum elevated, the post-scutellum having a deep central depression; the metathorax convex, shining and transversely striated. Abdomen: the base of the segments rufo-testaceous, in some examples obscurely so.

Hab. Silhet.

11. MYGNIMIA PERPLEXA. B.M.

Female. Length 12 lines.—Black: the head ferruginous. The pro- and meso-thorax, the scutellum, post-scutellum and tegulæ, ferruginous; the wings yellow, inclining to ferruginous at their base; the anterior wings have a dark fuscous border at their apex, and the posterior pair have their inferior margins fuscous towards their base; the legs pale ferruginous and spinose; the coxæ and base of the femora black, the posterior tibiæ serrated. Abdomen sessile, the apical segment ferruginous.

Hab. Madras.

This species differs from most of the species included in the genus, in having the abdomen sessile and the metathorax truncated; but the wings agree in their neuration with the type, the first recurrent nervure uniting with the second transverse one, and the second submarginal cell being elongated.

12. MYGNIMIA VESPIFORMIS. B.M.

Female. Length 14 lines.—Black: head without pubescence; the antennæ, palpi, labrum and mandibles, ferruginous; the apex of the latter black. Thorax: the tibiæ, tarsi, and apex of the femora more or less reddish-yellow; wings dark fuscous, with a violet iridescence; a subhyaline spot at the base of the second discoidal cell, and a transverse line near the apex of the first submarginal cell; the thorax is nearly destitute of pubescence, there being only a few long hairs on the anterior coxæ, and a very short pubescence on the disk; the metathorax transversely rugose-striate, and rounded behind. Abdomen thinly covered with short pubescence, concolorous with the parts it covers; the basal segment black, a band of the same colour on the margin of the second, united by a central stripe to a narrow one on the basal margin; the third and fourth segments have a fuscous band on their apical margins; the apex having some long ferruginous pubescence. The bands on the abdomen differ considerably in depth of colouring, in some specimens being only fuscous.

Hab. North China. (Coll. R. Fortune.)

13. MYGNIMIA FLAVICORNIS.

Sphex flavicornis, *Fabr. Ent. Syst.* ii. 216. 44.
Pepsis flavicornis, *Fabr. Syst. Piez.* p. 216. 44, & *Mus. Dom. Banks.*

Hab. Malabar.

14. MYGNIMIA CAPENSIS. B.M.

Sphex Capensis, *Linn. Syst. Nat.* i. 942. 4.
Fabr. Ent. Syst. ii. 216. 74.
Pompilus Capensis, *Fabr. Syst. Piez.* p. 196. 46.
Hemipepsis Capensis, *Dahlb. Hym. Europ.* i. 123. 1.

Hab. Cape of Good Hope.

15. MYGNIMIA BARBARA. B.M.

Pallosoma Barbara, *St. Farg. Hym.* iii. 495. 6.
Lucas, Explo. Sc. Algér. iii. 269. t. 14. f. 5.

Hab. Algeria (Oran).

16. MYGNIMIA ATROPOS. B.M.

Female. Length 12 lines. — Black: the head and thorax thinly clothed with black pubescence, that on the cheeks and metathorax is long and loose; the metathorax slightly convex and transversely striate, having on each side a raised longitudinal carina which is continued to the apex, not produced posteriorly; wings very dark fuscous, with a brilliant purple iridescence, varied with blue and chalybeous shades. Abdomen covered with greenish-blue iridescent pile.

Hab. Sierra Leone. (Coll. Rev. D. F. Morgan.)

17. MYGNIMIA ANTENNATA. B.M.

Female. Length 10 lines.—Black: the clypeus, labrum, palpi, mandibles in the middle, femora towards their apex, tibiæ and tarsi, rufo-ferruginous, the claws and extreme base of the apical joints of the tarsi black; the flagellum bright orange; metathorax rounded behind, transversely striate, most strongly so towards the apex, and having in the centre a longitudinal impressed line; wings nearly black, with a splendid mixed iridescence of violet, blue and purple. Abdomen obscurely æneous.

Male.—Rather smaller than the female, the apical joints of the flagellum slightly fuscous.

Hab. Port Natal.

18. MYGNIMIA VINDEX. B.M.

Female. Length 17 lines.—Black: the antennæ having the apex of the joints obscurely ferruginous; the clypeus having the anterior margin widely emarginate. Thorax obscurely æneous anteriorly and also at the sides, the legs having in some lights shades of blue; wings dark fuscous, with a bright violet irides-

cence; the metathorax truncate posteriorly, convex above and transversely striate. Abdomen clothed with a changeable iridescent pile.

Hab. South Africa. (Coll. Dr. A. Smith.)

19. MYGNIMIA TISIPHONE. B.M.

Female. Length 17 lines.—Black, smooth and shining: the clypeus widely emarginate in front; the wings dark brown, beautifully iridescent, partaking of shades of blue, purple and green; the metathorax opake, transversely striated, finely in centre and coarsely so at the sides, posteriorly truncate, the truncation opake; the tibiæ obscurely rufo-piceous beneath. Abdomen very smooth and shining, delicately and distantly punctured, the apical segment and also the apical margins of the segments beneath, rufo-piceous; beneath, the segments are more strongly and closely punctured than above.

Hab. South Africa.

20. MYGNIMIA SPECTRUM. B.M.

Female. Length 7–10 lines.—Rufo-testaceous: the eyes and tips of the mandibles fuscous; the post-scutellum and margins of the metathorax more or less fuscous, the latter transversely striated above and rounded behind; wings dark fuscous, with a brilliant iridescence partaking of shades of purple, violet and blue; the apical margins of the segments of the abdomen and a central longitudinal stripe rufo-fuscous.

Male.—Resembles the female in general colouring, but having the meso- and meta-thorax black, or fuscous; the sides of the thorax parallel, the metathorax truncate posteriorly and thinly covered with cinereous pubescence; the tegulæ and basal portion of the costal nerve rufo-testaceous.

This species resembles the *Pompilus glabratus* of Klug, but the neuration of the wings is entirely different.

Hab. Gambia; Interior of S. Africa. (Coll. Lord Derby.)

21. MYGNIMIA SABULOSA. B.M.

Female. Length 10 lines.—Black: without pubescence, or having only a few black hairs on the clypeus, anterior coxæ and the apex of the abdomen; the mandibles obscurely rufo-piceous; the flagellum fulvous beneath, brightest towards the apex; tips of the joints of the palpi ferruginous; the metathorax rounded behind, transversely striate, and having on each side posteriorly a minute tubercle; the scutellum and post-scutellum elevated in

the middle, forming small tubercles; wings dark fuscous, with a metallic-green iridescence. Abdomen smooth and shining, impunctate.

Male. Length 6 lines.—Differs in having the face, mandibles, antennæ, and anterior legs obscure ferruginous; the thorax and wings as in the other sex.

Hab. West Africa (Whydah).

22. MYGNIMIA INSIGNIS. B.M.

Female. Length 12 lines.—Black: head pale ferruginous or yellowish-red, the prothorax, tegulæ and legs of the same colour, the latter slightly spinose, the posterior tibiæ finely serrated; the metathorax truncate; the wings deep fuscous, with a brilliant violet iridescence. Abdomen black, the apex ferruginous.

Hab. West Africa.

This species is of precisely the same form as *M. perplexa*, and both scarcely appear to belong to the genus; but the only difference, that of having the metathorax truncate and the abdomen sessile, is of frequent occurrence in the *Pompilidæ*.

23. MYGNIMIA IMPERIALIS. B.M.

Male. Length 14 lines.—Black: the face below the insertion of the antennæ, the scape in front, the clypeus, labrum, palpi and mandibles, ferruginous, the tips of the latter black. Thorax: above, clothed with very short black velvety pubescence, the metathorax having an elevated longitudinal carina down the centre, the posterior lateral angles produced and forming obtuse tubercles; very finely transversely striate; wings black, with a rich purple iridescence, an obscure hyaline spot at the base of the second discoidal cell; the legs ferruginous, the intermediate and posterior coxæ, as well as the posterior femora above, fuscous; the abdomen covered with short black pubescence; the base slightly shining.

Hab. West Africa.

24. MYGNIMIA MEGÆRA.

Male. Length 12 lines.—Black: the clypeus rounded at its anterior margin; the thorax clothed with short black pubescence, that on the metathorax is long and thinly scattered; the metathorax convex above, transversely striated and truncate behind, the truncation smooth and shining; wings black, having a bril-

liant metallic iridescence, partaking of shades of blue, green and purple. Abdomen black, having a blue iridescent pile.

Hab. West Africa.

25. MYGNIMIA HEROS. B.M.

Pompilus heros, *Guér. Voy. Abyss. Lefeb.* vi. p. 35. 4. t. 7. f. 9 ♀.

Hab. Senegal; Abyssinia; Gambia.

26. MYGNIMIA USTULATA.

Hemipepsis ustulata, *Dahlb. Hym. Europ.* i. 123. 2.

Hab. Mexico.

Genus 13. PEPSIS.

Sphex, pt., *Fabr. Ent. Syst.* ii. 198 (1793).
Pepsis, pt., *Fabr. Syst. Piez.* p. 207 (1804).
Pompilus, *Halid. Trans. Linn. Soc.* xvii. 326.

1. PEPSIS ELEVATA. B.M.

Pepsis elevata, *Fabr. Syst. Piez.* 213. 30.
Pepsis Chiliensis, *St. Farg. Hym.* iii. 480. 17?
Pepsis obscura, *St. Farg. Hym.* iii. 490. 35, var. ♂.
Pepsis floralis, *St. Farg. Hym.* iii. 490. 36 ♀.

Hab. South America; Chili.

2. PEPSIS APICALIS.

Pepsis festiva, *Fabr. Syst. Piez.* 214. 31?
Pepsis apicalis, *Gray, Cuv. An. King. Griff.* p. 516. t. 76. f. 1 ♂.
Pepsis Thunbergi, *Dahlb. Hym. Europ.* i. 121. 9.
Pepsis pulchella, *St. Farg. Hym.* iii. 491. 37.

Hab. Brazil.

3. PEPSIS PRETIOSA. B.M.

Pepsis grossa, *Fabr. Syst. Piez.* p. 214. 32 ♂?
Pepsis pretiosa, *Dahlb. Hym. Europ.* i. 121. 7.
Pepsis bicolor, *St. Farg. Hym.* iii. 488. 31 ♂.
Pepsis grossa, *St. Farg. Hym.* iii. 487. 30?

Hab. Brazil.

The quotations of Fabricius and St. Fargeau are extremely doubtful, since both authors give the locality *India* for the species; a mistake may have been made in the first instance, and St. Fargeau may have adopted it.

4. PEPSIS LUTEICORNIS. B.M.

Pepsis luteicornis, *Fabr. Syst. Piez.* 214. 35 ♀.
Palis. de Beauv. Ins. Afric. et Amér. p. 39. t. 1. f. 5.
St. Farg. Hym. iii. 481. 19?
Pepsis Menechma, *St. Farg. Hym.* iii. 481. 19 ♂.

Hab. South America.

5. PEPSIS CÆRULEA. B.M.

Sphex cærulea, *Linn. Syst. Nat.* i. 947. 38.
Fabr. Ent. Syst. ii. 219. 90.
Sphex auripennis, *De Geer, Ins.* iii. 585. 1.
Sphex rubra, *Drury, Ins.* ii. 75. t. 39. f. 6.
Pepsis cærulea, *Fabr. Syst. Piez.* p. 214. 33.
St. Farg. Hym. iii. 475. 9.
Pepsis speciosa, *Palis. de Beauv. Ins.* p. 95. t. 2. f. 4?

Hab. South America; St. Domingo; Brazil (Amazons); Mexico.

6. PEPSIS STELLATA. B.M.

Sphex stellata, *Fabr. Ent. Syst.* ii. 219. 91.
Pepsis stellata, *Fabr. Syst. Piez.* p. 214. 32.
St. Farg. Ency. Méth. x. 64. 4; *Hym.* iii. 479. 16.

Hab. South America.

7. PEPSIS DECORATA. B.M.

Pepsis decorata, *Perty, Del. An. Art.* p. 143. t. 28. f. 1.
Pepsis dives, *St. Farg. Hym.* iii. 486. 28.

Hab. Brazil.

8. PEPSIS COMPLETA. B.M.

Female. Length 10 lines.—Black: clothed with a green or blue-green pilosity, four or five of the apical joints of the antennæ yellow; the metathorax transversely striated, convex, and rounded behind; the wings dark rufo-fuscous, with a changeable violet iridescence, and having a broad transverse, complete, yellow band, crossing the wings about one-third from their base; abdomen bright blue-green.

Hab. Brazil.

This species is closely allied to the *Pompilus dimidiatus* of Fabricius, from which it principally differs in the situation of the band, which constantly extends further on the wings, and the inferior wings are always black at the base.

9. PEPSIS CHRYSOBAPTA.

Female. Length 14 lines.—The head, thorax, coxæ and abdomen adorned with bright golden pile, that on the abdomen being thinner and less effulgent than on the head and thorax, on the apical margins of the segments it is of a rich golden lustre; the apex of the third joint of the antennæ and the nine apical ones bright orange-yellow; the maxillary lobe and palpi and also the labial palpi rufo-piceous, the articulations of the joints palest; legs black, with an obscure violet reflection; wings fulvo-hyaline, becoming paler towards their apical margins, the nervures ferruginous, the costal nervure fuscous. Abdomen: the pubescence at the apex ferruginous.

Hab. Brazil (Para). (Coll. W. W. Saunders, Esq.)

10. PEPSIS AUROZONATA. B.M.

Male. Length 12–15 lines.—Black: the face below the anterior stemma, the thorax, coxæ, basal segment of the abdomen, and a band on the apical margins of the following segments of short bright golden pubescence; the scape of the antennæ beneath, and the trochanters and femora beneath, usually with a golden iridescent pile, observable in certain lights; the flagellum ferruginous; the mesothorax black in front and at the sides, leaving an oblong golden patch on the disk, the middle of the scutellum black; the posterior lateral angles of the metathorax and also the middle produced; the metathorax is also transversely rugose-striate; wings subhyaline, the nervures ferruginous, the costal nervure fuscous; the extreme apex of the wings pale; the posterior tarsi elongate, broadly compressed, their pubescence black; the abdomen beneath has a bright golden pile on the apical margins of all the segments, covering two-thirds of the second segment, the fifth segment covered with fulvous pubescence.

Hab. Brazil.

11. PEPSIS AURIFEX. B.M.

Male. Length 9–14 lines.—Black: head, thorax, basal segment of the abdomen and the coxæ clothed with dense golden pile; in some examples the mesothorax anteriorly, the sides, and also the scutellum in the middle, are destitute of pile; the palpi, mandibles in the middle and the labrum rufo-ferruginous; the antennæ obscurely rufous, the apex more or less fuscous; the scape sometimes fuscous; metathorax transversely rugose-striate; the lateral angles and also the middle are produced; wings fusco-ferruginous, their extreme base and their apical

margins darkest, the nervures ferruginous; the extreme apex, in some examples subhyaline; a minute hyaline spot at the base of the second discoidal cell; the tibiæ and tarsi rufo-ferruginous, tips of the claws black. Abdomen: the basal segment entirely, and the apical margins of the four following, having a band, and the fifth and sixth segments entirely covered with golden pile; the apex rufo-testaceous and clothed with fulvous pubescence.

Hab. Brazil (Para; Santarem; Tapajos). (Coll. H. W. Bates.)

Small specimens of this species have the lateral tubercles and central produced point nearly obsolete, the antennæ of a brighter colour, and the entire insect nearly covered with brilliant golden effulgent pile.

12. PEPSIS ALBOCINCTA. B.M.

Male. Length 15 lines.—Black: the head, thorax on the sides and beneath, the legs and abdomen clothed with a deep blue pilosity, varying in brightness in different lights; the thorax is black above, the metathorax transversely rugose, having a longitudinal impressed line down the centre, and covered with a scattered long black pubescence; antennæ black, with two or three of the apical joints orange; wings very dark fusco-ferruginous; the second discoidal cell having a minute hyaline spot at its base; the apical and posterior margins of the wings white.

Hab. Brazil (Santarem). (Coll. H. W. Bates.) Columbia.

The female in the collection of W. W. Saunders, Esq.

Female. Length 1 inch 9 lines.—This sex has the wings margined as in the other sex, the antennæ black, the metathorax transversely rugose; the entire insect decorated with a splendid changeable blue and green pilosity; the legs thicker than is usual in this genus, and densely ciliated with stout spines, the posterior tibiæ strongly serrated on their outer edge.

13. PEPSIS FERRUGINIPENNIS.

Pompilus ferruginipennis, *Halid. Trans. Linn. Soc.* xvii. 326. 40.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

14. PEPSIS FUMIPENNIS.

Female. Length 16 lines.—Black: the head and thorax with an obscure æneous tinge; the seven apical joints of the antennæ cream-coloured; the wings smoky hyaline, the anterior pair

having a broad dark fuscous cloud at their apical margins, the nervures black, suffused with fuscous; the legs obscurely blue; the metathorax transversely strigose. Abdomen adorned with an obscure greenish-blue iridescent pile; the apex clothed with black pubescence.

Male.—Very closely resembling the female in colour; the antennæ porrect, the seven apical segments entirely cream-coloured, with usually three or four additional joints, white beneath; the posterior legs very long, the tarsi broad and compressed. Abdomen subpetiolate, of an obscure blue-black colour; beneath smooth and shining, the fourth segment thinly covered with black pubescence.

The number of pale apical joints in the antennæ of this species varies greatly; of four specimens examined (males), the numbers are, three, five, seven, and eight and a half; the number is the same in all the females yet obtained, namely seven.

Hab. Brazil (Para). (Coll. H. W. Bates.)

15. PEPSIS LEUCOBASIS. B.M.

Female. Length 14 lines.—Black, entirely covered with a blue pilosity; on the mesothorax it has a green tinge, varying in brightness; the scape has a blue or green tint, the flagellum black; wings brown-black, with varying shades of purple and violet iridescence; the apical margins of all the wings have a narrow white border, the base of the anterior pair to nearly one-third of their length, silvery; the extreme base black; the metathorax transversely rugose, the posterior lateral angles slightly produced; the abdomen of a shining blue.

The male closely resembles the female, only differing in being more slender, and in having the antennæ porrect and the legs more elongate.

Hab. Brazil; British Guiana.

16. PEPSIS LUCIDULA. B.M.

Female. Length 12 lines.—Black, adorned with a bright changeable iridescent blue pile; the legs have a brilliant purple reflection, and the vertex parts of the thorax and abdomen present a variety of deep black shades in different lights; the flagellum black, the scape blue; the mandibles nigro-piceous; the articulations of the joints of the palpi pale testaceous; the clypeus widely emarginate; the prothorax swollen on each side; the scutellum striated, but smooth in the centre, which is elevated; the metathorax transversely coarsely rugose-striate, having a longitudinal impressed line in the middle: wings dark

fuscous, with a slight metallic lustre; the first submarginal cell has an abbreviated line emanating from the stigma, the base of the second discoidal cell, and a larger irregular shape on the inferior wings, fulvo-hyaline. Abdomen of a bright prismatic blue, the apex thinly covered with long black hairs.

Male.—Bears a close resemblance to the female; the antennæ porrect, entirely black; the anterior wing has a line emanating from the stigma, the anterior margin of the first submarginal cell, the apex of the externo-medial cell, and the entire first discoidal cell, obscure rufo-hyaline.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

17. PEPSIS MUTABILIS. B.M.

Pepsis mutabilis, *St. Farg. Hym.* iii. 483. 23.

Hab. Brazil.

18. PEPSIS NITIDA.

Pepsis nitida, *St. Farg. Hym.* iii. 176. 12.

Hab. Brazil (Minas Geraes).

19. PEPSIS PURPURASCENS. B.M.

Female. Length 9 lines.—Black, adorned with changeable rich purple pile; the antennæ have the scape rufo-piceous in front, the flagellum fuscous above, rufo-fulvous beneath, the first and second joints fuscous beneath; the labrum, mandibles in the middle, and the palpi rufo-testaceous; metathorax elongate, transversely striate and channeled down the centre; the sides of the scutellum and base of the metathorax exhibiting in certain lights a golden effulgence; wings rufo-fuscous, their extreme apex hyaline; the legs have a rich purple iridescence, with a golden reflection in certain lights. Abdomen subpetiolate, bright purple, the apical margins of the segments obscurely rufo-piceous.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

20. PEPSIS SELADONICA. B.M.

Pepsis seladonica, *Dahlb. Hym. Europ.* i. 120. 4 ♂.
Pepsis virescens, *St. Farg. Hym.* iii. 484. 24.

Hab. Brazil.

21. PEPSIS SMARAGDINA.

Pepsis smaragdina, *Dahlb. Hym. Europ.* i. 120. 3 ♀.

Hab. Brazil.

22. PEPSIS SPECIOSA. B.M.

Male. Length 10–15 lines.—Black: the head, thorax and coxæ, densely clothed with rich golden pile; the hinder margin of the vertex, and an angular shape on the mesothorax anteriorly unadorned; the palpi and tips of the mandibles rufo-piceous; the antennæ of a fulvous-yellow, the scape and basal joint of the flagellum more or less fuscous; wings dark fuscous, varying in intensity in different examples; the extreme apex paler, scarcely hyaline; a minute hyaline spot at the base of the second discoidal cell; the scutellum elevated, the metathorax transversely rugose-sulcate, or deeply grooved, the posterior angles prominent and obtuse; the tarsi, the intermediate tibiæ at their apex, and the posterior tibiæ entirely, rufo-fulvous; the calcaria fulvous, the claws black. Abdomen: the basal segment entirely, the second at its apical margin, the third at both basal and apical margins, and the four apical segments entirely covered with golden pile; the apical segments most densely covered at their basal and apical margins.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

This in all probability is the male of *P. sumptuosa*.

23. PEPSIS VIRIDIS.

Pepsis viridis, *St. Farg. Hym.* iii. 485. 27.

Hab. Brazil.

24. PEPSIS XANTHOCERA. B.M.

Pepsis xanthocera, *Dahlb. Hym. Europ.* i. 120. 2 ♀.

Hab. Bahia; Brazil.

25. PEPSIS VARIPENNIS.

Pepsis varipennis, *St. Farg. Hym.* iii. 488. 32 ♂.

Hab. Brazil.

26. PEPSIS VAU-ALBA.

Female. Length 1 inch.—Black; covered with a dark blue pilosity, the abdomen very bright and shining: the antennæ black; the metathorax transversely coarsely rugose, having a central longitudinal impressed line; the anterior wings have

an elongated V-shaped mark formed of short bright silvery pubescence, not quite reaching the base of the wings; the legs have a deep violet splendour, and the abdomen partakes of a similar colouring.

Hab. Brazil (Amazons). (Coll. W. W. Saunders, Esq.)

27. PEPSIS VENUSTA. B.M.

Male. Length 10 lines.—Black: the entire insect clothed with a dark blue-green pilosity, varied with black in certain lights; the apical joint of the antennæ orange; the wings black, with varying shades of metallic blue and green in different lights, the apex of the anterior wings white, the white commencing at the extreme apex of the marginal cell; the abdomen bright green, very rich and vivid in certain lights; the metathorax transversely rugose and black.

Hab. Brazil (Tapajos).

28. PEPSIS DEUTEROLEUCA. B.M.

Male. Length 10–12 lines.—Black: clothed with an obscure blue pilosity, which in certain lights is intensely brilliant, particularly on the insect beneath; antennæ black; the metathorax transversely rugose-striate, its posterior lateral angles slightly produced; wings black and shining, the posterior pair white at their apex, in some specimens the tips are yellowish-white; the abdomen has a thick floccus of hair on each side of the fourth segment beneath.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

29. PEPSIS TERMINATA. B.M.

Pepsis terminata, *Dahlb. Hym. Europ.* i. 120. 6.
Pepsis ornata, *St. Farg. Hym.* iii. 486. 29.

Hab. South America.

30. PEPSIS NIGRESCENS. B.M.

Male. Length 14 lines.—Black: clothed with short black velvety pubescence; the cheeks, prothorax and metathorax having a long thin black pubescence; the legs have a dark purple pilosity, observable in certain lights; the metathorax elongate, transversely rugose, convex in the middle, longitudinally depressed on each side, and subcarinate at its lateral margins, which are slightly produced posteriorly; wing dark blackish-brown, and having a splendid violet and blue iridescence. Abdomen

subpetiolate, its pubescence black; the fourth segment beneath having a floccus of long thin curled black hair.

Hab. Demerara.

31. PEPSIS LIMBATA.

Pepsis limbata, *Guér. Voy. Coq. Zool.* ii. pt. 2. p. 225; *Atlas, Dict. Hist. Nat.* t. 471. f. 2.
Spin. Gay's Chili, vi. 373. 1.

Hab. Chili and Peru.

32. PEPSIS PETITII.

Pepsis Petitii, *Guér. Voy. Coq. Zool.* ii. pt. 2. 255. ♀. t. 115. f. 1.

Hab. Peru.

33. PEPSIS SUMPTUOSA.

Female. Length 15 lines.—Black: the face as high as the anterior stemma densely covered with golden pile; the antennæ orange-yellow, the first, second, and basal half of the third joint, black; the pubescence on the thorax black; an oblong shape on the disk, the sides of the scutellum, the post-scutellum, metathorax, sides of the thorax, and the coxæ more or less, adorned with rich golden pile; wings dark fusco-ferruginous, the second discoidal cell having a small hyaline spot at the base. Abdomen having a changeable violet iridescent pile, the pubescence at the apex black.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

34. PEPSIS VITRIPENNIS.

Female. Length 1 inch 5–7 lines.—Black, adorned with a changeable blue pilosity; the antennæ beneath obscurely yellow towards their apex; the thorax black above, with faint reflections of blue in certain lights; the metathorax transversely strigose, its posterior margin raised, and the lateral angles subacute and produced; wings splendidly iridescent, partaking of brilliant tints of violet, blue and green effulgence; the legs partake of the same colouring, but less vivid in certain lights. Abdomen adorned with a changeable blue iridescence.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

35. PEPSIS GRACILIS. B.M.

Pepsis gracilis, *St. Farg. Hym.* iii. 474. 8.

Hab. Cayenne.

36. PEPSIS RUFICORNIS. B.M.

Sphex ruficornis, *Fabr. Ent. Syst.* ii. 219. 88.
Pepsis ruficornis, *Fabr. Syst. Piez.* 215. 36.
Palis. de Beauv. Ins. Afric. et Amér. p. 94. t. 2. f. 1.
St. Farg. & Serv. Ency. Méth. x. 64. 6.
Dahlb. Hym. Europ. i. 119. 1.
St. Farg. Hym. iii. 480. 18.

Hab. Cayenne; Honduras.

37. PEPSIS VIRIDISETOSA. B.M.

Pepsis viridisetosa, *Spin. Ann. Soc. Ent. Fr.* x. 104. 59 (1841).

Hab. Cayenne; Brazil (Santarem). (Coll. H. W. Bates.)

The pubescence on the meso- and meta-thorax is sometimes pale fulvous, or in very recent examples of a golden lustre.

38. PEPSIS DIMIDIATA. B.M.

Pepsis dimidiata, *Fabr. Syst. Piez.* p. 216. 47.
St. Farg. Ency. Méth. x. 64. 3; *Hym.* iii. 478. 15.

Hab. Cayenne; Brazil.

39. PEPSIS DECOLORATA.

Pepsis decolorata, *St. Farg. Hym.* iii. 474. 7.

Hab. Cayenne.

40. PEPSIS ATRATA.

Pepsis atrata, *St. Farg. Hym.* iii. 470. 1 ♀.

Hab. Cayenne.

41. PEPSIS QUADRATA.

Pepsis quadrata, *St. Farg. Hym.* iii. 478. 14.

Hab. St. Domingo.

42. PEPSIS SAPPHIRUS. B.M.

Pepsis sapphirus, *Palis. de Beauv. Ins. Afric. et Amér.* p. 39. t. 1. f. 4.

Hab. St. Domingo; Demerara.

43. PEPSIS MARGINATA. B.M.

Pepsis marginata, *Palis. de Beauv. Ins. Afric. et Amér.* p. 94. t. 2. f. 2 ♀, 3 ♂.
St. Farg. & Serv. Ency. Méth. x. 54. 1.

Hab. South America; St. Domingo.

44. PEPSIS SULPHUREICORNIS. B.M.

Pepsis sulphureicornis, *Palis. de Beauv. Ins. Afric. et Amér.* p. 95. t. 2. f. 6.

Hab. St. Domingo.

45. PEPSIS AMETHYSTINA. B.M.

Sphex amethystina, *Fabr. Ent. Syst.* ii. 210. 49.
Pepsis amethystina, *Fabr. Syst. Piez.* p. 215. 41.
Palis. de Beauv. Ins. Afric. et Amér. p. 38. t. 1. f. 2.

Hab. Demerara; St. Domingo; Island of St. Croix.

46. PEPSIS DOMINGENSIS. B.M.

Pepsis Domingensis, *St. Farg. Hym.* iii. 477. 13 ♂.

Hab. St. Domingo.

47. PEPSIS BONARIENSIS. B.M.

Pepsis Bonariensis, *St. Farg. Hym.* iii. 176. 11 ♀.

Hab. Buenos Ayres.

48. PEPSIS ELONGATA. B.M.

Pepsis elongata, *St. Farg. Hym.* iii. 482. 21.

Hab. Surinam.

49. PEPSIS MONTEZUMA. B.M.

Female. Length 16 lines.—Black: the head, thorax, abdomen and legs adorned with a rich blue iridescent pile, most vivid on the abdomen; the thorax having shades of metallic green and black in certain lights; the head, thorax and coxæ have a scattered long loose black pubescence; the antennæ, mandibles and palpi black; the metathorax having a transverse rugose waved striation, and a central abbreviated longitudinal depres-

sion, and on each side at the base and apex an obtuse tubercle; wings of a reddish-yellow, having a broad fuscous stain at the base, the apical margins having a paler cloud at their apex, not extending to the third submarginal cell in width. Abdomen of a splendid blue, the pubescence at the apex black.

Male. Length 12 lines.—In colour closely resembling the female, but the abdomen is bright violet, and the wings are paler; the fourth segment of the abdomen, beneath, has on each side a floccus of long curled hair.

Hab. Mexico; Columbia. (Coll. W. W. Saunders, Esq.)

50. PEPSIS PRISMATICA. B.M.

Male. Length 10 lines.—Black: antennæ of an orange-red, having three or four of the basal and apical joints of the antennæ fuscous; the labrum, mandibles and palpi nigro-piceous; the entire insect exhibiting in different lights beautiful prismatic colours, of blue, purple and violet; wings nearly black, with a slight blue and green iridescence; metathorax transversely strigose; abdomen subpetiolate.

Hab. Mexico.

51. PEPSIS DISELENE.

Male. Length 12 lines.—Black: the pubescence black, the extreme apex of the flagellum yellow; wings dark fuscous; a large subovate silvery spot on the anterior wings a little beyond the middle, the spot formed of very short fine silvery pubescence; a subhyaline spot at the base of the second discoidal cell; the metathorax thinly covered with long black pubescence, transversely strigose, the posterior lateral angles produced. Abdomen subopake, slightly shining at the base.

Hab. India (Singapore). (Coll. W. W. Saunders, Esq.)

52. PEPSIS RUFIPES.

Pepsis rufipes?, *St. Farg. Hym.* iii. 472. 5.

Hab. Cape of Good Hope.

53. PEPSIS RUFICEPS.

Pepsis ruficeps, *St. Farg. Hym.* iii. 489. 34 ♀.

Hab. Cape of Good Hope.

54. PEPSIS OCELLATA.

Pepsis ocellata, *Fabr. Syst. Piez.* 215. 37.

Hab. Africa.

55. PEPSIS CYANEA.

Sphex cyanea?, *Linn. Amœn. Acad.* vi. 412. 90; *Syst. Nat.* i. 941. 2.

Fabr. Ent. Syst. ii. 201. 13; *Syst. Piez.* p. 211. 17.

Palis. de Beauv. Ins. Afric. et Amér. p. 318. t. 1. f. 3.

Hab. United States.

56. PEPSIS ELEGANS. B.M.

Pepsis elegans, *St. Farg. Hym.* iii. 489. 33 ♂.

Hab. Pennsylvania; Georgia.

The female is similarly coloured to the male, but is usually more brilliant in colour, the abdomen being sometimes of a rich purple, owing to the beautiful iridescence of the short pubescence or pile which clothes it; the red margin of the abdominal segments of the male, as described by St. Fargeau, is attributable to the iridescence of the pile, and is most observable in sunlight.

EXPLANATION OF THE PLATES.

PLATE A.—Fig. 1.

a. The costal nervure.
b. The apical margin.
c. The posterior margin.
d. The post-costal nervure.
e. The externo-medial nervure.
f. The anal nervure.
g. The transverso-medial nervure.
h. The radial nervure.
i. The cubital nervure.
k. The discoidal nervure.
l. The subdiscoidal nervure.
m. The transverso-cubital nervures.
n. The recurrent nervures.
o. The stigma.

PLATE A.—Fig. 2.

1. The costal cell.
2. The externo-medial cell.
3. The interno-medial cell.
4. The anal cell.
5. The marginal cell.
6. The first submarginal cell.
7. The second submarginal cell.
8. The third submarginal cell.
9. The fourth submarginal cell.
10. The first discoidal cell.
11. The second discoidal cell.
12. The third discoidal cell.
13. The first apical cell.
14. The second apical cell.

PLATE I.

Fig.
1. *Bradynobænus Gayi.*
2. *Mutilla attenuata.*
3. *Mutilla capitata.*
4. *Mutilla Astarte.*
5. *Apterogyna Mutilloides.*

Fig.
6. Wing of *Apterogyna Mutilloides.*
7. Wing of *Mutilla.*
8. Wing of *Myrmosa.*

PLATE II.

Fig.
1. *Scolia pulchra.* Div. I.
2. *Scolia irregularis.* Div. II.
3. *Scolia bidens.* Div. III.

Fig.
4. *Scolia zonata.* Div. IV.
5. *Epomidiopteron Julii.*

PLATE III.

1. *Myzine sexfasciata* ♂.
2. *Scleroderma cylindrica* ♂.
3. *Scleroderma cylindrica* ♀.
4. *Meria Klugii.*
5. *Polochrum repandum.*
6. Head of *Polochrum repandum.*
7. Wing of *Sapyga punctata.*
8. Wing of *Methoca ichneumonoides* ♂.

PLATE IV.

1. *Pompilus Gravesii.*
2. *Ceropales longipes.*
3. *Maurillus Australis.*
4. *Aporus bicolor.*
5. *Planiceps Latreillii.*
6. Anterior leg of *Planiceps Latreillii.*
7. Head of *Planiceps Latreillii.*

PLATE V.

1. *Macromeris splendida.*
2. Anterior wing of *Mygnimia.*
3. Anterior wing of *Pepsis.*
4. Posterior leg of *Pepsis* ♂.
5. Anterior wing of *Pompilus niger.*
6. Anterior wing of *Pompilus punctum.*
7. Thorax and head of *Notocyphus* ♀.
8. Anterior wing of *Notocyphus* ♀.

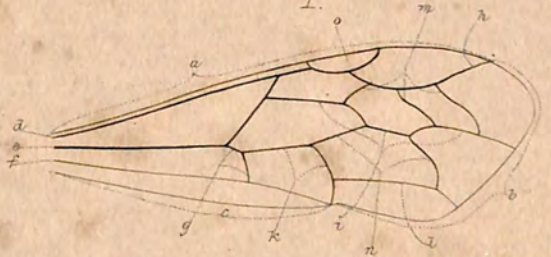
List of the typical specimens of *Pompili* in the Museum at Kiel, described by Fabricius in the *Systema Piezatorum*, referred by Professor Bĕhn to the genera in which they appear in this Catalogue.

Ceropales fasciata,	*Syst. Piez.*	p.	186. 4.	Pompilus rufipes.
—— punctum,	„	„	187. 9.	—— punctum.
Pompilus collaris,	„	„	188. 2.	Ferreola collaris.
—— fuscus,	„	„	189. 11.	Pompilus sepicola.
—— sanguinolentus,	„	„	192. 19.	Ferreola sanginolenta.
—— fuscatus,	„	„	192. 22.	Pompilus rufipes.
—— micans,	„	„	192. 23.	—— micans.
—— splendidulus,	„	„	193. 25.	—— nobilis.
—— bifasciatus,	„	„	193. 26.	—— bifasciatus.
—— gibbus,	„	„	193. 27.	—— gibbus.
—— bipunctatus,	„	„	195. 38.	—— variabilis.
—— hircanus,	„	„	195. 40.	—— variegatus.
—— exaltatus,	„	„	195. 41.	—— exaltatus.
—— Capensis,	„	„	196. 46.	Mygnimia Capensis.
—— luteipennis,	„	„	198. 54.	Pompilus luteipennis.
—— fulvipennis,	„	„	198. 57.	Mygnimia fulvipennis.
—— nobilis,	„	„	199. 58.	Pompilus nobilis.
—— captivus,	„	„	199. 61.	—— captivus.
Pepsis gigas,	„	„	213. 28.	—— gigas.
—— grossa,	„	„	213. 32.	Pepsis grossa.
—— cærulea,	„	„	214. 33.	—— cærulea.
—— lusca,	„	„	214. 38.	Pompilus luscus.
—— 4-punctata,	„	„	215. 39.	—— 4-punctatus.
—— plumbea,	„	„	215. 40.	—— plumbeus.
—— amethystina,	„	„	215. 41.	—— amethystinus.
—— nigrita,	„	„	216. 43.	—— nigritus.
—— flavicornis,	„	„	216. 44.	—— flavicornis.
—— speciosa,	„	„	216. 45.	Pepsis speciosa.
Liris hyalinata,	„	„	230. 11.	Pompilus hyalinatus.

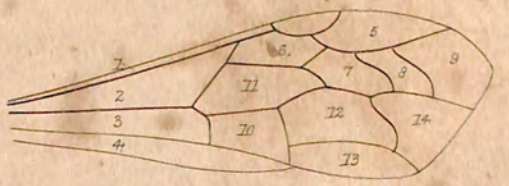
List of the typical specimens of Fossorial Hymenoptera in the Banksian Collection, preserved in the Museum of the Linnæan Society of London, described by Fabricius in the *Systema Piezatorum*; referred to the genera in which they appear in this Catalogue, with the size of the typical specimens in twelfths of an inch, by Frederick Smith.

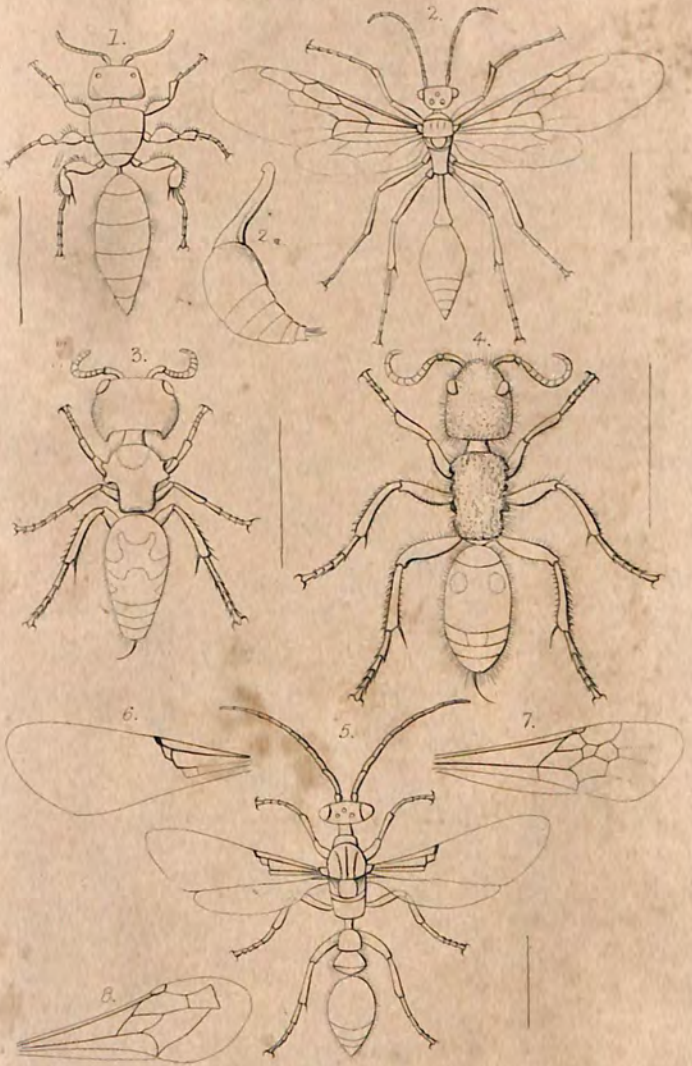
			Lines.
Mutilla formicaria,	*S. Piez.* p. 430. 7.	Mutilla formicaria.	7
—— aurata,	„ „ 430. 9.	—— aurata.	5
—— ruficornis,	„ „ 431. 13.	—— ruficornis.	
—— collaris,	„ „ 435. 32.	Scolia collaris.	10
Scolia globularis,	*Ent. S.* ii. 237. 37.	Apterogyna globularis.	6½
Elis 7-cincta,	*S. Piez.* p. 249. 4.	Scolia 7-cincta.	
Tiphia 5-cincta,	„ „ 233. 6.	Myzine 5-cincta.	
—— radula,	„ „ 235. 5.	Scolia radula.	10
Scolia nigrita,	„ „ 240. 4.	—— nigrita.	11
—— ferruginea,	„ „ 241. 16.	—— ferruginea.	11½
—— 5-fasciata,	„ „ 243. 28.	—— 5-fasciata.	8
—— bicincta,	„ „ 243. 30.	—— obscura.	8
—— verticalis,	„ „ 244. 33.	—— verticalis.	6
Pompilus morio,	„ „ 187. 1.	Pompilus morio.	7½
—— collaris,	„ „ 188. 2.	Ferreola collaris.	7
—— frontalis,	„ „ 188. 3.	—— frontalis.	5
—— analis,	„ „ 188. 4.	Pompilus analis.	7
—— similis,	„ „ 189. 8.	—— similis.	4½
—— fasciatus,	„ „ 194. 30.	—— fasciatus.	5
—— cinereus,	„ „ 194. 31.	—— cinereus.	4
—— fugax,	„ „ 194. 35.	—— fugax.	7
—— nitidus,	„ „ 195. 36.	—— fugax (var.).	7
—— nigricornis,	„ „ 195. 39.	—— nigricornis.	4
—— abdominalis,	„ „ 196. 45.	Ceropales abdominalis.	5
—— turcicus,	„ „ 197. 47.	Pompilus turcicus.	6½
—— bicolor,	„ „ 198. 56.	—— bicolor.	14
Liris cingulata,	„ „ 230. 9.	Aporus cingulatus.	
Pepsis cærulea,	„ „ 214. 33.	Pepsis cærulea.	14
—— ocellata,	„ „ 215. 37.	—— ocellata.	11
—— nigrita,	„ „ 216. 43.	Pompilus nigritus.	10
—— flavicornis	„ „ 216. 44.	Mygnimia flavicornis.	10

1.



2.

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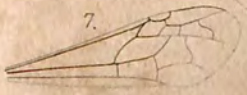
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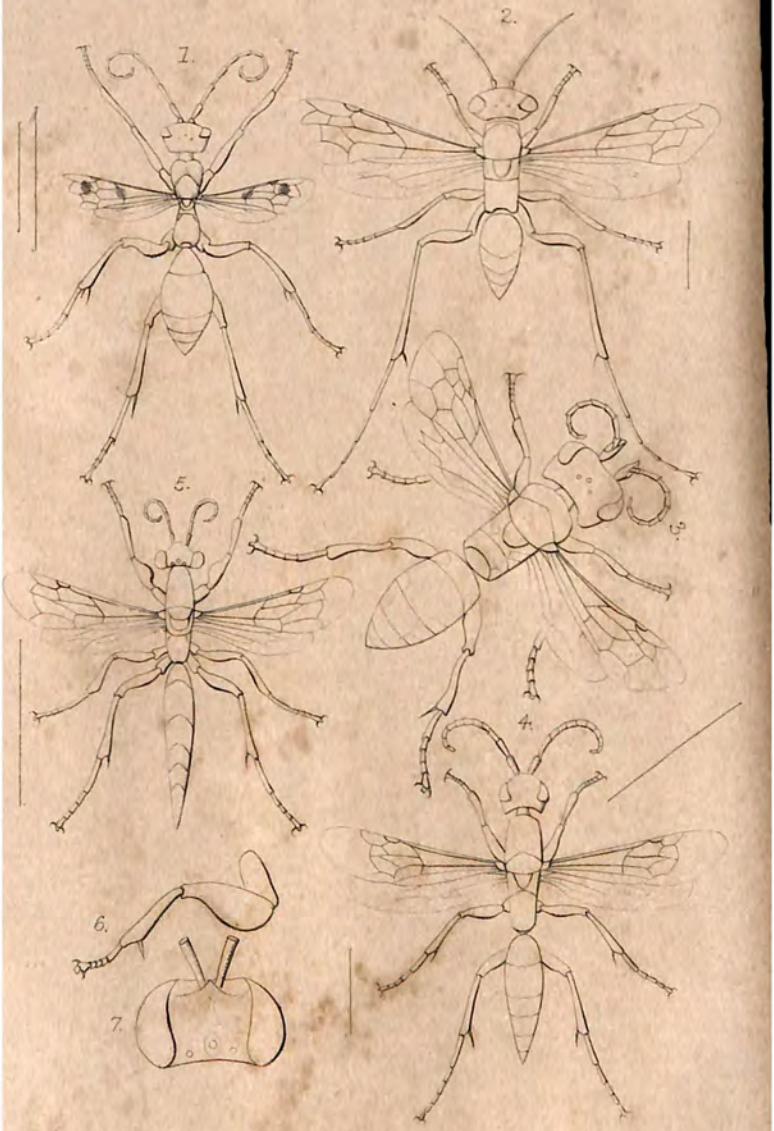
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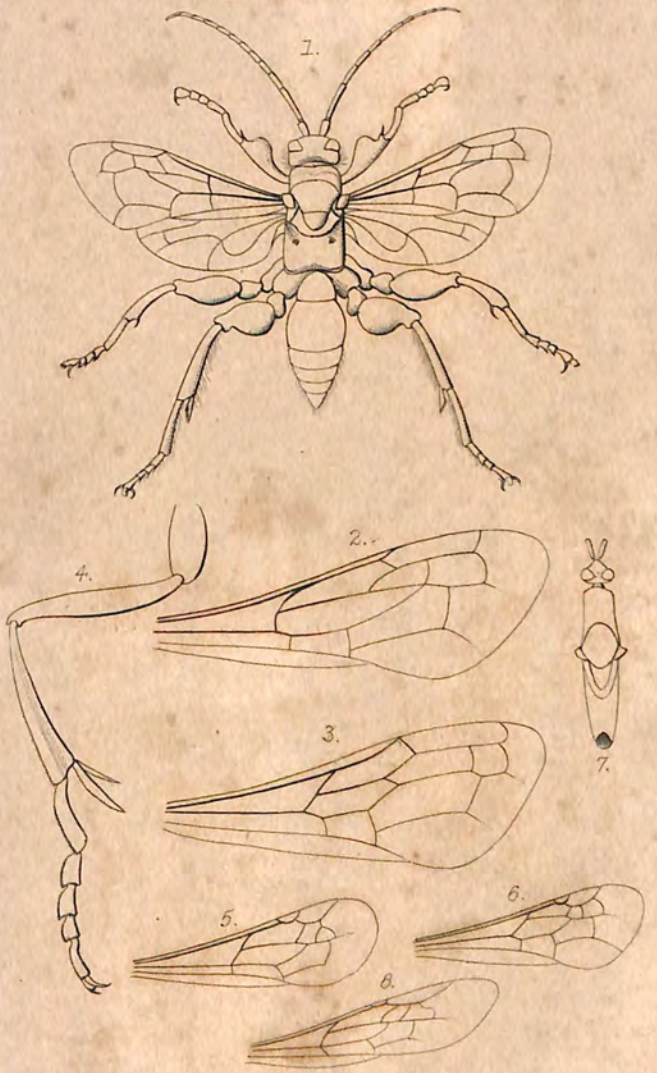
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CATALOGUES

OF

THE ZOOLOGICAL COLLECTION

IN

THE BRITISH MUSEUM.

I. VERTEBRATA.

List of Mammalia. By Dr. J. E. GRAY, F.R.S. &c. 1843. 2*s.*6*d.*

Catalogue of the Mammalia. By Dr. J. E. GRAY, F.R.S. &c.

Part 1. Cetacea. 12mo, 1850. 4*s.*, with Plates.
Part 2. Seals. 12mo, 1850. 1*s.* 6*d.*, with Woodcuts.
Part 3. Hoofed Quadrupeds. Section I. (Ungulata furcipeda) 1852, with Plates of Genera, 12*s.*

This work contains the description of the genera and species, and figures of the chief characters of the genera.

List of Mammalia and Birds of Nepaul, presented by B. H. Hodgson, Esq., to the British Museum. By Dr. J. E. GRAY and G. R. GRAY. 1846. 2*s.*

List of Birds. By G. R. GRAY, F.L.S. &c.

Part 1. Raptorial. Edition 1, 1844; edition 2, 1848. 3*s.*
Part 2. Passeres. Section I. Fissirostres. 1848. 2*s.*
Part 3. Gallinæ, Grallæ and Anseres. 1844. 2*s.*

The other sections of the Passerine birds are in progress.

List of British Birds. By G. R. GRAY, F.L.S. &c. 1850. 4*s.*

List of the Eggs of British Birds. By G. R. GRAY, F.L.S. &c. 1852. 2*s.* 6*d.*

Catalogue of Reptiles. By Dr. J. E. GRAY, F.R.S., V.P.Z.S. &c.

Part 1. Tortoises, Crocodiles and Amphisbænians. 1844. 1*s.*
Part 2. Lizards. 1845. 3*s.* 6*d.*
Part 3. Snakes (Crotalidæ, Viperidæ, Hydridæ and Boidæ). 1849. 2*s.* 6*d.*
Part 4, completing the Snakes (Colubridæ), is in preparation.

Catalogue of Amphibia. By Dr. J. E. GRAY, F.R.S., V.P.Z.S.

Part 2. Batrachia Gradientia. 12mo, 1850. 2*s.* 6*d.* with Plates of the Skull and Teeth.

Catalogue of Fish. By Dr. J. E. GRAY, F.R.S., V.P.Z.S.

Part 1. Cartilaginous Fish. 12mo, 1851. 3*s*. With two Plates.

These Catalogues of *Reptiles, Amphibia,* and *Fish,* contain the characters of all the genera and species at present known; the latter are illustrated with figures of the genera.

List of British Fish; with Synonyma. By A. WHITE, F.L.S. &c. 1851. 3*s*.

List of Osteological Specimens. By Dr. J. E. GRAY, F.R.S. &c. and G. R. GRAY, F.L.S. 1847. 2*s*.

II. ANNULOSA.

Catalogue of Lepidoptera. By G. R. GRAY, F.L.S.

Part 1. Papilionidæ, with coloured figures of the new species. £1 : 5*s*. 4to, 1852.

List of Lepidopterous Insects. By E. DOUBLEDAY, F.L.S.

Part 1. Papilionidæ, &c. 1844. 2*s*. 6*d*.
Part 2. Erycinidæ, &c. 1847. 9*d*.
Part 3. Appendix to Papilionidæ, Erycinidæ, &c. 1848. 9*d*.

List of Hymenopterous Insects. By F. WALKER, F.L.S.

Part 1. Chalcididæ. 1846. 1*s*. 6*d*.
Part 2. Additions to Chalcididæ. 1848. 2*s*.

Catalogue of Hymenopterous Insects. By FREDERICK SMITH, M.E.S.

Part 1. Andrenidæ, &c. 1853. 2*s*. 6*d*., with Plates.

Catalogue of Dipterous Insects. By F. WALKER, F.L.S.

Part 1. 1848. 3*s*. 6*d*.
Part 2. 1849. 3*s*. 6*d*.
Part 3. 1849. 3*s*.
Part 4. 1849. 6*s*.

Catalogue of Homopterous Insects. By F. WALKER, F.L.S.

Part 1. 1850. 3*s*. 6*d*.
Part 2. 1850. 5*s*.
Part 3. 1851. 3*s*. 6*d*.
Part 4. 1852. 4*s*., with Plates.

Catalogue of Neuropterous Insects. By F. WALKER, F.L.S.

Part 1. 1852. 2*s*. 6*d*.
Part 2. 1853. 3*s*. 6*d*.
Part 3. 1853. 1*s*. 6*d*.

The Catalogues of *Hymenopterous, Dipterous,* and *Homopterous* Insects contain the description of the species in the Museum which appeared to be undescribed.

Catalogue of Hemipterous Insects. By W. S. DALLAS, F.L.S. &c. With Plates, Part 1. 1851. 7*s*. Part 2. 1852. 4*s*.

The Catalogue of *Hemiptera* contains the description of the new species in the Museum Collection, and figures of the more interesting genera.

Nomenclature of Coleopterous Insects (with characters of new species).

Part 1. Cetoniadæ. 1847. 1*s*. By A. WHITE, F.L.S. &c.
Part 2. Hydrocanthari. 1847. 1*s*. 3*d*. By A. WHITE, F.L.S.
Part 3. Buprestidæ. 1848. 1*s*. By A. WHITE, F.L.S.
Part 4. Cleridæ. 1849. 1*s*. 8*d*. By A. WHITE, F.L.S.
Part 5. Cucujidæ. 1851. 6*d*. By F. SMITH, M.E.S.
Part 6. Passalidæ. 1852. 8*d*. By F. SMITH, M.E.S.
Part 7. Longicornia, with Plates, 1853. 2*s*. 6*d*. By A. WHITE, F.L.S.

List of Crustacea; with Synonyma. By A. WHITE. 1847. 2*s*.

List of Myriapoda. By G. NEWPORT, F.R.S. &c. 1844. 4*d*.

List of British Lepidoptera; with Synonyma. By J. F. STEPHENS, F.L.S. Part 1. 1850. 5*s*. Part 2. 1852. 2*s*. Part 3. 1853. 9*d*.

List of British Aculeate Hymenoptera; with Synonyma, and the description of some new species. By F. SMITH. 1851. 2*s*.

List of British Anoplura, or Parasitic Insects; with Synonyma. By H. DENNY. 1*s*.

List of British Crustacea; with Synonyma. By A. WHITE, F.L.S. 1850. 2*s*. 6*d*.

Catalogue of Entozoa; with Plates. By W. BAIRD, M.D., F.L.S. 1853. 2*s*.

III. MOLLUSCA.

Catalogue of the Mollusca in the Collection of the British Museum. By Dr. J. E. GRAY, F.R.S., &c.

Part 1. Cephalopoda Antepedia. 1849. 4*s*.
Part 2. Pteropoda. 1850. 1*s*.
Part 3. Placuniadæ and Anomiadæ. 1850. 4*d*.
Part 4. Brachiopoda Ancylopoda; figures of genera. 1853. 3*s*.

Containing the characters of the recent and fossil genera, and the descriptions of all the recent species at present known.

Catalogue of Phaneropneumona or Operculated Terrestrial Mollusca. By Dr. LOUIS PFEIFFER. 1852. 5*s*.

Catalogus Concharum Bivalvium. By M. G. P. DESHAYES.

Part 1. Veneridæ, &c. 1853. 3*s*.

List of British Mollusca and Shells; with Synonyma. By Dr. J. E. GRAY, F.R.S.

Part 1. Acephala and Brachiopoda. 1851. 3*s.* 6*d.*

Nomenclature of Mollusca. By Dr. W. BAIRD, F.L.S. &c.

Part 1. Cyclophoridæ. 1851. 1*s.* 6*d.*

IV. RADIATA.

Catalogue of Marine Polyzoa. By G. BUSK, F.R.S. &c., with characters and figures of all the species.

Part 1. Chilostoma. 1852. 17*s.*

Catalogue of the Echinidæ or Sea Eggs. By Dr. J. E. GRAY, F.R.S.

Part 1. Echinida irregularia. 12mo, with Plates.

Containing the characters of all the known genera and species, and illustrated with figures of the new species.

List of British Radiata; with Synonyma. By Dr. J. E. GRAY, F.R.S. 1848. 4*s.*

List of British Sponges; with Synonyma. By Dr. J. E. GRAY, F.R.S. 1848. 10*d.*

V. BRITISH ZOOLOGY.

List of the British Animals; with Synonyma and references to figures.

Part 1. Radiata. By Dr. J. E. GRAY. 1848. 4*s.*
Part 2. Sponges. By Dr. J. E. GRAY. 1848. 10*d.*
Part 3. Birds. By G. R. GRAY. 1850. 4*s.*
Part 4. Crustacea. By A. WHITE. 1850. 2*s.* 6*d.*
Part 5. Lepidoptera. By J. F. STEPHENS. 1850. 5*s.*
Part 6. Hymenoptera. By F. SMITH. 1851. 2*s.*
Part 7. Mollusca Acephala and Brachiopoda. By Dr. J. E. GRAY. 1851. 3*s.* 6*d.*
Part 8. Fish. By A. WHITE. 1851. 3*s.*
Part 9. Eggs of British Birds. By G. R. GRAY. 1852. 2*s.* 6*d.*
Part 10. Lepidoptera (continued). By J. F. STEPHENS. 1852. 2*s.*
Part 11. Anoplura or Parasitic Insects. By H. DENNY. 1*s.*
Part 12. Lepidoptera (continued). By J. F. STEPHENS. 1852. 9*d.*
Part 13. Nomenclature of Hymenoptera. By F. SMITH. 1853. 1*s.* 8*d.*
Part 14. Nomenclature of Neuroptera. By A. WHITE. 1853.

N.B.—These Catalogues can be obtained at the Secretary's Office in the BRITISH MUSEUM; of Messrs. LONGMAN & Co.; or of any Bookseller.

June 1853.

CATALOGUE

OF

HYMENOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

BY

FREDERICK SMITH, M.E.S.

PART IV.

SPHEGIDÆ, LARRIDÆ, AND CRABRONIDÆ.

LONDON:
PRINTED BY ORDER OF THE TRUSTEES.
1856.

PRINTED BY TAYLOR AND FRANCIS,
RED LION COURT, FLEET STREET.

PREFACE.

THE object of the present Catalogue is to give a complete list of all the genera and species of Fossorial Hymenoptera which have been described in works, and a description of those in the British Museum which appear to have been hitherto overlooked.

The letters B.M. in the margin show the species now contained in the British Museum, and their absence indicates those which are desiderata, and therefore desirable to be procured for the Collection.

JOHN EDWARD GRAY.

12th June, 1856.

CATALOGUE

OF

HYMENOPTERA.

Div. II. ACULEATA.

Tribe 2. FOSSORES, *Latr.*

Fam. 3. SPHEGIDÆ.

The posterior margin of the *prothorax* not prolonged backwards to the insertion of the wings, anteriorly produced into a neck. *Abdomen* petiolated.

Genus 1. AMMOPHILA.

Sphex, pt., *Linn. Faun. Suec.* 411 (1761).
Pompilus, pt., *Fabr. Ent. Syst. Supp.* 246 (1798).
Pepsis, pt., *Fabr. Syst. Piez.* 207 (1804).
Ammophila, *Kirby, Trans. Linn. Soc.* iv. 195 (1804).
Psammophila, *Dahlb. Hym. Europ.* i. 16 (1843).

1. AMMOPHILA SABULOSA. B.M.

Sphex sabulosa, *Linn. Faun. Suec.* no. 1648; *Syst. Nat.* i. 941. 1. et *Cab. Mus. Linn. Soc.*
Scop. Ent. Carn. 770. f. 770.
Frisch, Ins. ii. t. 1. f. 6, 7, 8.
De Geer, Ins. ii. 822. t. 28. f. 7.
Fabr. Syst. Ent. p. 346. 1.
Schrank, Ins. Aust. 768.
Rossi, Faun. Etrus. ii. 60. 808.

Sphex sabulosa, *Christ. Hym.* p. 311. t. 31. f. 2.
Panz. Faun. Germ. 65. 12.
Latr. Hist. Nat. xiii. 292. 1.
Spin. Ins. Lig. i. 71. 1.
Jurine, Hym. i. 128.
Zett. Ins. Lapp. 435. 1.
Ammophila vulgaris, *Kirby, Trans. Linn. Soc.* iv. 195. 1.
Ammophila sabulosa, *Latr. Nouv. Dict.* ed. 2. i. 450; *Gen. Ins.* iv. 54.
Van d. Lind. Obs. i. 85. 2.
Brullé, Hist. Nat. Il. Canar. iii. 61.
Shuck. Foss. Hym. p. 75. 1.
Dahlb. Hym. Europ. i. 9, 10.
St. Farg. Hym. iii. 376. 17.
Wesm. Hym. Foss. Belg. 69. 1.

Hab. Britain; France; Germany; Italy; Sweden; Lapland; Algeria.

2. AMMOPHILA VIATICA. B.M.

Sphex viatica, *Linn. Faun. Suec.* no. 1651; *Syst. Nat.* i. 943. 15, et *Cab. Mus. Linn. Soc.*
De Geer, Ins. ii. 152. t. 28. f. 16.
Sphex hirsuta, *Scop. Ent. Carn.* p. 772. f. 772.
Schrank, Ins. Aust. p. 380. 769.
Sphex arenaria, *Fabr. Mantis.* i. 273. 1.
Rossi, Faun. Etrus. ii. 60. 809.
Panz. Faun. Germ. 65. 13.
Zett. Ins. Lapp. p. 435. 2.
Ammophila hirsuta, *Kirby, Trans. Linn. Soc.* iv. 195. 4.
Van d. Lind. Obs. pt. 1. 89. 6.
Shuck. Foss. Hym. p. 77. 2.
Brullé, Expéd. Sc. Morée, iii. 369. 812.
St. Farg. Hym. iii. 364. 1.
Lucas, Explo. Sc. Algér. iii. 274. 1.
Pepsis arenaria, *Fabr. Syst. Piez.* p. 207. 1.
Illig. Ed. Faun. Etrus. ii. 92. 809.
Ammophila argentea, *Kirby, Trans. Linn. Soc.* iv. 195. 4 ♂.
Psammophila viatica, *Dahlb. Hym. Europ.* i. 18. 12.
Wesm. Hym. Foss. Belg. 69. 1.
Ammophila viatica, *Smith, Cat. Brit. Hym.* 16. 2.

Hab. Britain; France; Italy; Germany; Denmark.

3. AMMOPHILA LUTARIA. B.M.

Sphex lutaria, *Fabr. Mantis.* i. 273. 3 ♂.
Gmel. Ed. Syst. Nat. i. pt. 5. p. 2724. 24.

Sphex lutaria, *Vill. Ent.* iii. 225. 17.
Jurine, Hym. p. 128.
Pepsis lutaria, *Fabr. Syst. Piez.* p. 208. 2.
Ammophila affinis, *Kirby, Linn. Trans.* iv. 195. 2 ♂ ♀.
Van d. Lind. Obs. i. 87. 5.
Shuck. Foss. Hym. p. 16. 6.
St. Farg. Hym. iii. 369. 8.
Lucas, Explo. Sc. Algér. iii. 274.
Psammophila affinis, *Dahlb. Hym. Europ.* i. 16. 11.
Wesm. Hym. Foss. Belg. 70. 2.

Hab. Britain; France; Germany; North Africa (Oran).

4. Ammophila holosericea. B.M.

Sphex holosericea, *Fabr. Ent. Syst.* ii. 205. 27; *Syst. Piez.* p. 207. 4.
Illig. Ed. Faun. Etrus. ii. 90. 808.
Coqueb. Illust. ii. 50. t. 12. f. 1.
Ammophila holosericea, *Germ. Reise Dalm.* p. 260. 345.
Van d. Lind. Obs. i. 86. 3.
Dahlb. Hym. Europ. i. 9.
St. Farg. Hym. iii. 378. 19.
Lucas, Explo. Sc. Algér. iii. 275.

Hab. Barbary; Dalmatia; France; Germany; Africa (Oran).

5. Ammophila armata.

Sphex sabulosa, *Rossi, Faun. Etrus.* ii. 60. 808; *Faun. Etrus. Mantis.* ii. *Append.* t. 6. f. *a.* mas, *b.* fem.
Sphex armata, *Illig. Ed. Faun. Etrus.* ii. 91.
Ammophila armata, *Latr. Gen. Cr. et Ins.* iv. 54.
Van d. Lind. Obs. i. 85. 1.
St. Farg. Hym. iii. 371. 11. t. 30. f. 4.
Léon Dufour, Ann. Soc. Ent. Fr. vii. 291 (1838).

Hab. South of France; Italy.

6. Ammophila dives. B.M.

Ammophila dives, *Brullé, Expéd. Sc. Morée*, iii. 369. 813, *Atlas*, t. 50. f. 10.

Hab. The Morea.

7. Ammophila Klugii.

Ammophila Klugii, *St. Farg. Hym.* iii. 367. 5.

Hab. Portugal.

8. AMMOPHILA HEYDENI.

Psammophila Heydeni, *Dahlb. Hym. Europ.* i. 430.

Hab. Central Europe.

9. AMMOPHILA ELONGATA.

Ammophila elongata, *Fisch. de Waldh. Mag. Zool.* (*Guér.*) 1843.

Hab. Russia.

10. AMMOPHILA NITIDA.

Ammophila nitida, *Fisch. de Waldh. Mag. Zool.* (*Guér.*) 1843.

Hab. Russia.

11. AMMOPHILA MADERÆ. B.M.

Psammophila Maderæ, *Dahlb. Hym. Europ.* i. 21 & 432.
Psammophila senilis, *Dahlb. Hym. Europ.* i. 21 & 432.

Hab. Madeira; South of Europe.

12. AMMOPHILA TERMINATA. B.M.

Ammophila apicalis, *Brullé, Hist. Nat. Il. Canar.* iii. pt. 2. p. 92. 62 (nec *Guér.*) 1832.

Hab. Canary Islands.

13. AMMOPHILA NIGRA.

Ammophila nigra, *Brullé, Hist. Nat. Il. Canar.* ii. pt. 2. p. 92. 64.

Hab. Canary Islands.

14. AMMOPHILA CONCOLOR.

Ammophila concolor, *Brullé, Hist. Nat. Il. Canar.* iii. pt. 2. p. 92. 63.

Hab. Canary Islands.

15. AMMOPHILA FERA.

Ammophila fera, *St. Farg. Hym.* iii. 365. 2.

Hab. Roumelia.

16. AMMOPHILA MELANOPUS.

Ammophila melanopus, *Lucas, Explo. Sc. Algér.* iii. 276, 277. t. 14. f. 8.

Hab. Algeria.

17. AMMOPHILA NASUTA. B.M.

Ammophila nasuta, *St. Farg. Hym.* iii. 380. 20.
Léon Dufour, Ann. Soc. Ent. Fr. vii. 292.
Lucas, Explo. Sc. Algér. iii. 375. t. 14. f. 7.

Hab. Algeria (Oran); Portugal.

18. AMMOPHILA ARGENTEA. B.M.

Ammophila argentea, *Brullé, Hist. Nat. Il. Canar.* iii. 65.
Ammophila argentata, *St. Farg. Hym.* iii. 366. 3.? t. 30. f. 2.
Lucas, Explo. Sc. Algér. iii. 274. t. 14. f. 6.

Hab. Canary Islands; Algeria (Oran).

19. AMMOPHILA FESTIVA. B.M.

Female. Length 12 lines.—Black: head and thorax clothed with silvery pile, dense and brilliant on the face and sides of the thorax, as well as on the collar; a broad silver stripe passes over the tegulæ and unites with a similar stripe which runs from the collar to the middle of the disk; the anterior legs and intermediate femora and tibiæ ferruginous; the femora fuscous above; the calcaria pale rufo-testaceous; wings hyaline, the nervures and margins of the tegulæ ferruginous. Abdomen: thinly covered with silvery pile, the petiole and first segment of the abdomen black at the base; the apex, the second and third segments above and the entire abdomen beneath, ferruginous.

Hab. Tunis.

20. AMMOPHILA RUBRIPES.

Ammophila rubripes, *Spin. Ann. Soc. Ent. Fr.* vii. 465. 19 (1838).

Hab. Egypt.

21. AMMOPHILA EBENINA.

Ammophila ebenina, *Spin. Ann. Soc. Ent. Fr.* vii. 464. 18.
St. Farg. Hym. iii. 366. 4.

Hab. Egypt.

22. AMMOPHILA INCANA. B.M.

Ammophila incana, *Dahlb. Hym. Europ.* i. 21. 423.

Hab. Africa.

23. AMMOPHILA CANESCENS.

Ammophila canescens, *Dahlb. Hym. Europ.* i. 21 & 432.

Hab. Africa.

24. AMMOPHILA FERRUGINEIPES. B.M.

Ammophila ferrugineipes, *St. Farg. Hym.* iii. 383. 24.

Hab. Cape of Good Hope; Port Natal; Sierra Leone; the Gambia.

Specimens of this species, received from Port Natal and Sierra Leone, have the petiole black above, as well as the posterior femora, the prothorax being entirely red, smooth and shining. Of an extensive series from the Gambia, some have the sides of the thorax more or less ferruginous; others have the thorax black, with the exception of a red spot on the collar; but several have the thorax entirely black, and the tarsi, as well as the posterior legs, fuscous.

25. AMMOPHILA RUGICOLLIS.

Ammophila rugicollis, *St. Farg. Hym.* iii. 373. 14.

Hab. Cape of Good Hope.

26. AMMOPHILA RUBIGINOSA.

Ammophila rubiginosa, *St. Farg. Hym.* iii. 372. 12.

Hab. Cape of Good Hope. (Coll. F. Smith.)

27. AMMOPHILA BONÆ-SPEI. B.M.

Ammophila Bonæ-Spei, *St. Farg. Hym.* iii. 382. 23.
Lucas, Explo. Sc. Algér. iii. 276.

Hab. Cape of Good Hope.

28. AMMOPHILA TENUIS. B.M.

Sphex tenuis, *Pal. de Beauv. Ins.* p. 48. t. 7. f. 2.

Hab. Sierra Leone.

29. AMMOPHILA LUDOVICUS.

Female. Length 15 lines.—Black: the clypeus anteriorly and the mandibles ferruginous, the latter black at their apex; the face thinly covered with silvery pile, and having a number of short, scattered, stiff black hairs. Thorax rugose; the mesothorax posteriorly, the scutellum and post-scutellum longitudinally striated; the enclosed portion of the metathorax coarsely rugose, but having on each side a small space transversely striated; the tubercles and a spot on each side of the metathorax, at the insertion of the petiole, covered with silvery pile; the

wings deep fuscous, adorned with brilliant purple iridescence; the legs and the abdomen black, the latter thinly covered with fine grey silky pile.

Hab. Port Natal. (Coll. W. W. Saunders, Esq.)

30. AMMOPHILA INSIGNIS.

Female. Length 14 lines.—Head black, with the clypeus, mandibles and antennæ ferruginous; the tips of the mandibles black, and four or five of the apical joints of the flagellum fuscous. Thorax ferruginous, the mesothorax in the middle, above, and a stain at the sides and beneath fuscous; the metathorax fuscous above; the mesothorax transversely striated; the entire thorax clothed with very short pale golden pubescence, which is dense on the metathorax and on the sides, concealing the sculpture; legs red, the posterior trochanters above, and the femora at their base above having a fuscous line; wings hyaline, their nervures and tegulæ red. The abdomen beneath, the petiole and basal segment red, the following segments black above.

Male. Length 13 lines.—Black; the clypeus much produced, its apex emarginate, and having a longitudinal elevated carina down the middle; the face clothed with pale golden pubescence. Thorax black; wings as in the other sex; the legs red; the tarsi, a stripe on the intermediate femora above, the posterior coxæ, trochanters and femora, fuscous. Abdomen: the petiole fuscous above; otherwise as in the other sex.

Hab. Africa (the Gambia). (Coll. W. W. Saunders, Esq.)

31. AMMOPHILA ERYTHROPUS.

Ammophila rufipes, *St. Farg. Hym.* iii. 367. 5, nec *Guér.*

Hab. Senegal; Gambia. (Coll. F. Smith.)

Specimens from the Gambia have the mandibles, anterior margin of the clypeus, and three basal joints of the antennæ, ferruginous.

32. AMMOPHILA CYANIPENNIS. B.M.

Ammophila cyanipennis, *St. Farg. Hym.* iii. 370. 9.

Hab. Senegal.

33. AMMOPHILA BENINIENSIS. B.M.

Sphex Beniniensis, *Pal. de Beauv. Ins.* p. 48. t. 7. f. 1.

Hab. West Africa (Benin); Sierra Leone; Port Natal.

34. AMMOPHILA CLAVUS.

Sphex clavus, *Fabr. Ent. Syst.* ii. 205. 26; *Syst. Piez.* 206. 3.

Hab. New Holland. (Banksian Collection, Mus. Linn. Soc.)

35. AMMOPHILA SUSPICIOSA. B.M.

Female. Length 7–8 lines.—Black: the face densely covered with silvery pile; the head and thorax thinly clothed with long silvery-white pubescence; the pro- and mesothorax strongly punctured, the metathorax rugose; the wings hyaline, with a faint cloud at their apical margins, the nervures ferruginous; the legs have a thin silvery pile. Abdomen with the petiole, the base of the first segment, the apical margin of the third and the following segments entirely black.

The male only differs in being smaller and more slender in form.

Hab. Australia (Swan River; Hunter River; North-west Coast).

The only difference between this species and *A. argentata* consists in the coloration of the abdomen; probably it is a mere variety.

36. AMMOPHILA INSTABILIS. B.M.

Female. Length 10 lines.—Black: the scape, two basal joints of the antennæ, and the mandibles ferruginous; the base and tips of the latter black; the face thinly covered with silvery pile. Thorax: the prothorax, and mesothorax before the insertion of the wings, transversely striated; the posterior portion of the mesothorax is obliquely striated inwardly, the scutellum and post-scutellum longitudinally striated, and the metathorax transversely so; the collar on each side, the tubercles, a spot beneath the wings, the metathorax, scutellum, post-scutellum and legs, ferruginous; the wings flavo-hyaline, the nervures and tegulæ pale ferruginous. Abdomen: the petiole, basal segment of the abdomen and basal half of the following segment ferruginous; the rest of the abdomen blue-black, and a black spot at the base of the second joint of the petiole.

Hab. Australia (Swan River; Port Essington).

The colouring of the metathorax is very inconstant in this species; in some examples the sides only of the metathorax are ferruginous, in others it is entirely black, and the spot beneath the wings, the scutellum and post-scutellum are likewise black: varieties also occur between these extremes.

37. AMMOPHILA BASALIS. B.M.

Female. Length 7½–8½ lines.—Black: the head smooth,

shining, and thinly covered with fine sericeous pile; on the clypeus it is dense and silvery; the mandibles and scape ferruginous, the former black at their tips, the latter fuscous above. Thorax: the pro- and mesothorax transversely striated, the latter has a longitudinal impressed central line; the enclosed portion of the metathorax evenly and obliquely striated; the striation irregular beyond; the tubercles, apex of the metathorax, and the coxæ covered with silvery pile; the legs ferruginous, the coxæ, trochanters above and the apical joints of the tarsi fuscous: sometimes the coxæ are black; the wings hyaline, their apical margins faintly clouded, the nervures ferruginous; the second transverso-cubital nervure geniculated, sometimes having a short appendage at the angle of the geniculation. Abdomen: blue-green, with the two basal segments ferruginous, the extreme base of the second joint of the petiole black, the apical margin of the second segment blue-green.

Hab. India (N. India; Punjaub).

38. AMMOPHILA NIGRIPES. B.M.

Male. Length 7 lines.—Black: the face clothed with silvery pile; the cheeks and sides of the thorax thinly covered with silvery-white pubescence; the vertex smooth and shining; the entire thorax transversely striated above; the scutellum and post-scutellum longitudinally striated; wings subhyaline, the nervures and tegulæ pale ferruginous. The second joint of the petiole beneath, and the first segment of the abdomen ferruginous; the apical margin of the latter and the following segments blue, covered above with silvery pile.

Hab. Madras.

39. AMMOPHILA LÆVIGATA. B.M.

Female. Length 7½ lines.—Black: the face densely covered with silvery pile; the head, pro- and mesothorax smooth and shining, the latter having only a few delicate punctures; the enclosed portion of the metathorax rugoso, its sides striated; the sides of the thorax, the coxæ and trochanters thinly covered with silvery pile; the anterior and intermediate femora and tibiæ ferruginous; the posterior femora and base of the tibiæ ferruginous, with a black stripe above; one or two of the basal joints of the anterior and intermediate tarsi ferruginous. Abdomen: the petiole and first segment of the abdomen ferruginous, with usually an uninterrupted black stripe above, which is occasionally more or less abbreviated; the rest of the abdomen black.

Hab. Madras; Guzerat.

40. AMMOPHILA DIMIDIATA. B.M.

Female. Length 11 lines.—Head and thorax black; the scape, five or six of the basal joints of the flagellum, the clypeus in the middle, and the mandibles ferruginous; the latter black at their tips. The pro- and mesothorax above and the scutellum ferruginous and transversely striated; the metathorax rugose, the sides of the enclosed space striated; on each side of the enclosure, one or two minute ferruginous spots; these are sometimes obsolete; wings yellow, their apical margins faintly clouded, a fuscous spot at the apex of the marginal cell; legs and tegulæ ferruginous, the coxæ more or less fuscous or black at their base. Abdomen bright blue, the petiole ferruginous, with a fuscous spot at the base of the second joint.

Hab. India (Bombay; Madras; N. Bengal).

41. AMMOPHILA ERYTHROCEPHALA. B.M.

Sphex erythrocephala, *Fabr. Ent. Syst.* ii. 204. 23.
Pelopœus erythrocephalus, *Fabr. Syst. Piez.* p. 203. 2; *Cab. Banks. Mus. Linn. Soc.*
Ammophila erythrocephala, *St. Farg. Hym.* iii. 385. 26.

Hab. India (Punjaub). (Coll. Gen. Hearsey.)

42. AMMOPHILA ELEGANS. B.M.

Female. Length 10 lines.—Black: the head and thorax densely clothed with silvery pile; the scape in front, and the basal half of the mandibles ferruginous. The metathorax transversely striated; the wings hyaline, the nervures rufo-fuscous; the tegulæ and legs ferruginous; the coxæ, posterior trochanters, and the anterior and intermediate pairs above, black; the posterior femora black towards their base above; the first joint of the petiole, and the base of the second joint black; the rest of the abdomen ferruginous, the apical margins of the segments being pale; the third segment has a fuscous spot in the middle of its base.

Male. Length 9 lines.—This sex closely resembles the female, differing only in having several fuscous spots down the middle of the abdomen.

Var. The tarsi fuscous, sometimes only the anterior and intermediate pairs.

Hab. Northern India (Punjaub).

The male differs in having the petiole almost entirely red, and in all the specimens examined, merely a fuscous spot at

the base of the second joint of the petiole; the abdomen has only a dark stain on the sixth segment.

43. AMMOPHILA ATRIPES. B.M.

Ammophila atripes, *Smith, Ann. & Mag. Nat. Hist.* ser. 2. ix. 46 (1852).

Hab. India (Khandala); Sumatra; China (Shanghai).

This species is frequently more highly coloured than the specimens described from Khandala, the first segment of the abdomen being red, with merely the base of the second joint black; the three basal joints of the tarsi are also ferruginous; the wings hyaline, and yellowish towards their base.

44. AMMOPHILA SIMILLIMA. B.M.

Female. Length 11 lines.—Black: the face densely covered with silvery pile; the scape ferruginous, slightly fuscous above. Thorax: the tubercles and apex of the metathorax covered with silvery pile; the pro- and metathorax transversely deeply striate; the scutellum and post-scutellum longitudinally striate; the metathorax rugose, the sides of the enclosed space obliquely striated; the tibiæ and femora ferruginous, the intermediate and posterior femora having a black stripe above, which sometimes extends from their base to their apex; one or two of the basal joints of the anterior and intermediate tarsi ferruginous or fusco-ferruginous; the wings yellowish, their nervures black. Abdomen: the second joint of the petiole ferruginous towards its apex; the abdomen blue.

Hab. China (Hong Kong).

This species closely resembles *A. atripes*, of which it may prove to be an extreme variety.

45. AMMOPHILA SMITHII.

Ammophila Smithii, *Baly, MSS.*

Female. Length 10½ lines.—Black: the head and thorax covered with silvery pile, which is very dense on the face, cheeks, thorax beneath, the coxæ, and sides of the metathorax; the scape, anterior margin of the clypeus and the mandibles ferruginous, the latter black at their tips; the legs red, the intermediate and posterior tarsi fusco-ferruginous; wings hyaline, the tegulæ and nervures ferruginous. The first joint of the petiole fusco-ferruginous, the second with a black spot at its base above; the abdomen red, the fourth segment having a large black spot

in the centre of its apex, and the fifth and sixth segments being entirely black.

Hab. India. (Coll. J. S. Baly, Esq.)

46. AMMOPHILA PUNCTATA. B.M.

Female. Length 8 lines.—Black: the face covered with silvery pile, the cheeks and sides of the thorax have a thin long white pubescence; the head, pro- and metathorax, scutellum and post-scutellum strongly punctured; the metathorax transversely rugose, and having a central longitudinal carina; its extreme apex, the sides of the thorax, and the tubercles densely clothed with silvery pile; the collar has a minute tubercle in the middle; the wings hyaline and iridescent, their apical margins faintly clouded: Abdomen: the second joint of the petiole, except its extreme base, and the first and second segments of the abdomen ferruginous.

Hab. Northern India.

47. AMMOPHILA VAGABUNDA. B.M.

Female. Length 9 lines.—Black: the face has a few scattered large punctures interspersed with very fine ones. The prothorax transversely rugose anteriorly and punctured posteriorly, and having an abbreviated impressed line at its hinder margin; the mesothorax has a longitudinal central impressed line, and is strongly punctured, the punctures becoming confluent, and forming irregular striæ at the sides; the scutellum longitudinally rugose; the enclosed portion of the metathorax obliquely rugose-striate, the sides of the thorax and also beneath rugose; the wings subhyaline, slightly iridescent, and faintly clouded at their apical margins. Abdomen: the second joint of the petiole and first segment of the abdomen ferruginous, the base of the former black; the apical segments of a blue-black.

Hab. North China (Tein-tung; Foo-chou-foo); Sumatra; Northern India.

48. AMMOPHILA PULCHELLA. B.M.

Male. Length 8½–10 lines.—Black: the face covered with silvery pile; the pro- and metathorax transversely striated; the scutellum and post-scutellum longitudinally striated, the metathorax rugose; the wings flavo-hyaline, and having a faint cloud on their apical margins, the nervures fusco-ferruginous; the underside of the second joint of the abdomen ferruginous; the abdomen blue, and thinly covered with cinereous pile.

Hab. Hong Kong; North China (Shanghai).

This is probably the male of *A. simillima*.

49. AMMOPHILA OPULENTA. B.M.

Ammophila opulenta, *Guér. Voy. Coq. Zool.* pt. 2. p. 261.

Hab. Para; Rio.

Specimens received from Rio differ somewhat in sculpture from those of Para; the mesothorax has a deep longitudinal impressed line, and the metathorax is much more finely striated, but it has not been considered more than a local variety.

50. AMMOPHILA EXIMIA. B.M.

Ammophila eximia, *St. Farg. Hym.* iii. 373. 13.

Hab. Brazil.

51. AMMOPHILA TARSATA.

Ammophila urnaria, *St. Farg. Hym.* iii. 381. 22 (nec *Dahlb.*).

Hab. Brazil.

52. AMMOPHILA MONETA.

Female. Length 10 lines.—Head, thorax and legs black; the face covered with dense pale golden pubescence; the clypeus truncate, and having a few scattered punctures. Thorax: the tubercles, an oblong stripe beneath the wings, a spot on each side at the base of the metathorax, and another on each side at the insertion of the petiole, covered with pale golden pubescence; the enclosed portion of the metathorax obliquely striated; the mesothorax transversely rugose, the scutellum longitudinally striated; wings fusco-hyaline. Abdomen blue, the petiole black.

The male resembles the female, but has the clypeus produced and deeply notched at the apex.

Hab. Brazil. (Coll. F. Smith.)

53. AMMOPHILA FRAGILIS. B.M.

Female. Length 8–9 lines.—Black: the face and tubercles covered with pale golden sericeous pubescence; an elongate oblique stripe beneath the wings, a spot of golden pubescence on each side of the metathorax at its base, and another at its apex; the pro- and mesothorax have an elongate central channel, and another on each side over the tegulæ; the scutellum and post-scutellum longitudinally rugose-striate; the enclosed portion of the metathorax rugose in the middle and striated at the sides; wings hyaline, their apical margins faintly clouded;

the legs black; the abdomen blue-black, the second joint of the petiole and base of the abdomen ferruginous beneath.

The male only differs in being rather smaller.

Hab. Brazil.

54. AMMOPHILA RUFIPES.

Ammophila rufipes, *Guér. Voy. Coq. Zool.* pt. 2. p. 262. *Atlas, Ins.* no. 9. f. 1.
Spin. Gay's Chili, vi. 393. 1.

Hab. Peru.

55. AMMOPHILA ABBREVIATA. B.M.

Pelopœus abbreviatus, *Fabr. Syst. Piez.* p. 204. 8.
Ammophila abbreviata, *Dahlb. Hym. Europ.* i. 15.
St. Farg. Hym. iii. 375. 15.
Erichs. Faun. et Fl. Brit. Guiana, 588. 1.

Hab. South America.

56. AMMOPHILA EUGENIA.

Female. Length 15 lines.—Head and thorax black; the face densely clothed with golden pile; the clypeus produced and having a short blunt tooth at the apex; mandibles ferruginous, their tips black. The pro- and mesothorax and also the tegulæ covered with a changeable pale golden silky pile; the tubercles, a large patch beneath the wings, and a spot at the apex of the metathorax, on each side of the insertion of the petiole, of pale golden pubescence; the coxæ and breast are also thinly covered with a similar coloured pile; the enclosed portion of the metathorax obliquely rugose-striate in the middle and evenly striated at the sides; the legs red; a stripe on the intermediate femora above, another above and beneath on the posterior pair, the knees, the tips of the joints of the tarsi, and the claw-joint, entirely black; the wings hyaline, their apical margins faintly clouded. Abdomen ferruginous, covered with a fine sericeous pile; the first joint of the petiole and the base of the second joint black; the third segment black, its apical margin narrowly ferruginous in the middle.

Hab. Rio Grande. (Coll. W. W. Saunders, Esq.)

57. AMMOPHILA RUFICOSTA.

Ammophila ruficosta, *Spin. Gay's Chili*, vi. 394. 2.

Hab. Chili.

58. AMMOPHILA GRACILIS.

Ammophila gracilis, *St. Farg. Hym.* iii. 381. 21.

Hab. Mexico.

59. AMMOPHILA ATRICEPS. B.M.

Female. Length 8 lines.—Black: head coarsely punctured; the anterior margin of the clypeus rounded; the face and cheeks have a long thin black pubescence, a few black hairs also on the vertex. Thorax coarsely punctured, and having a long thin griseous pubescence; the enclosed portion of the metathorax rugose at the base and rugose-striate at the apex; wings fusco-hyaline, the nervures black. Abdomen ferruginous; the petiole, the apical half of the fourth segment, and the fifth and sixth, black.

Male.—This sex has the head clothed with black pubescence and the face silvery; the clypeus slightly produced, its anterior margin rounded; the thorax is closely punctured; the abdomen as in the female.

Hab. Mexico.

60. AMMOPHILA BREVICEPS. B.M.

Female. Length 8 lines.—Black: the face densely covered with silvery pile; the vertex smooth; the sides of the thorax clothed with silvery pile, the disk and mesothorax thinly covered with pile, the latter transversely striated; the mesothorax punctured and having a central longitudinal impressed line; the wings hyaline and iridescent, their apical margins faintly clouded; the nervures rufo-testaceous, the tegulæ and legs ferruginous; the coxæ and base of the femora black; the posterior tibiæ slightly fuscous towards their apex. Abdomen red; the first joint of the petiole black, the second more or less fuscous above; the first segment of the abdomen has an elongate fuscous stripe above, the third a small spot at its basal margin, the fourth is black except a narrow apical border, and the extreme apex is fuscous.

Hab. Mexico.

Only a single specimen of this species is in the Collection: it is most probable that a series would exhibit great variety in the markings on the abdomen: in general appearance it closely resembles *A. nasuta*, but the clypeus is not produced.

61. AMMOPHILA PLACIDA. B.M.

Male. Length 9 lines.—Black: the face and cheeks have a long thin black pubescence. The prothorax smooth; the meso-

thorax very finely wrinkled transversely, and having on each side before the tegulæ a short impressed line; the metathorax very delicately transversely striated, beyond the enclosed portion rugose; the wings hyaline with stains of yellow, the nervures and tegulæ behind pale ferruginous; the apical margins of the wings faintly clouded. Abdomen: the petiole elongate, the second joint towards the apex beneath, and the base of the first segment of the abdomen ferruginous.

Hab. California.

62. AMMOPHILA GRYPHUS. B.M.

Female. Length 14–16 lines.—Black: the face thinly covered with silvery pile; the clypeus slightly produced, punctured and subemarginate; the vertex smooth, and covered, as well as the cheeks, with a thin fine silky pile; the pro- and mesothorax transversely striated, the latter having a central longitudinal impressed line; the scutellum and post-scutellum longitudinally striate; the metathorax obliquely striated; the tubercles silvery, an oblique silvery stripe beneath the wings, and a similar one behind it on the sides of the metathorax, the apex of the latter and the posterior coxæ above covered with silvery pile; the wings subhyaline, with a narrow fuscous stripe beyond the marginal cell. Abdomen: the petiole elongate, the second joint beneath, at its apex above, and the first segment of the abdomen ferruginous; the following segments obscurely æneous.

Male.—Sculptured and adorned like the female, differing in being rather smaller, and in the abdomen and petiole being black above, the basal segment of the abdomen ferruginous beneath.

Hab. North America (Charleston; East Florida; California).

Specimens from California are smaller and have more red on the abdomen; in every other particular they agree with those from the Eastern States.

63. AMMOPHILA SÆVA. B.M.

Female. Length 11–12 lines.—Head and thorax black; the face and cheeks covered with short silvery pubescence; the vertex smooth and shining. The pro- and mesothorax transversely, irregularly and coarsely striated, and each having a central longitudinal deeply impressed line; the mesothorax has also posteriorly a deep longitudinal depression on each side of the central one; the metathorax has the enclosed portion obliquely striated from the centre; the sides of the thorax and the pectus rugose; a minute spot of silvery pubescence beneath the wings at their

insertion, two broad oblique lines on the sides of the thorax, the metathorax behind, also the intermediate and posterior coxæ behind, covered with silvery pubescence; the wings fusco-hyaline, the posterior pair palest, hyaline towards their base. Abdomen ferruginous; the first joint of the petiole and a large macula on the fourth and fifth segments above, black.

Hab. California.

64. AMMOPHILA INTERCEPTA. B.M.

Ammophila intercepta, *St. Farg. Hym.* iii. 378. 18.

Hab. North America (Illinois).

65. AMMOPHILA ARVENSIS.

Ammophila arvensis, *St. Farg. Hym.* iii. 384. 25.

Hab. North America.

66. AMMOPHILA URNARIA. B.M.

Ammophila urnaria, *Dahlb. Hym. Europ.* i. 14.
Ammophila conditor, *Harris, Cat. Ins. Massach.*

Hab. South Carolina; Nova Scotia; St. John's Bluff, East Florida.

67. AMMOPHILA NIGRICANS.

Ammophila nigricans, *Dahlb. Hym. Europ.* i. 14.

Hab. South Carolina.

68. AMMOPHILA CONDITOR. B.M.

Female. Length 8½ lines.—Black: the clypeus coarsely punctured; the prothorax transversely striated; the mesothorax coarsely punctured, the punctures running into striæ at the sides; the scutellum longitudinally grooved; the enclosed portion of the metathorax obliquely striated, beyond which it is rugose; wings fusco-hyaline, the nervures and tegulæ behind ferruginous. Abdomen: the petiole elongate, the second joint and first segment of the abdomen red, the base of the former black towards the base above.

Hab. St. John's Bluff, East Florida.

69. AMMOPHILA CEMENTARIA. B.M.

Female. Length 7–8½ lines.—Black: head strongly punctured, thinly covered with long black pubescence; the pro- and mesothorax, scutellum and post-scutellum coarsely punctured;

the collar has an impressed line in the centre, as well as the mesothorax; the enclosed portion of the metathorax finely aciculate transversely, beyond it is strongly punctured. The thorax covered with long black pubescence at the sides; wings dark fuscous, the posterior pair being subhyaline towards their base; the apical margins have a darker cloud, and the wings are adorned with a violet iridescence. Abdomen ovate, attached by a short petiole, which is black; the first and second segments red.

Hab. St. John's Bluff, East Florida; Georgia.

70. AMMOPHILA LUCTUOSA. B.M.

Female. Length 9 lines.—Black: head and thorax coarsely punctured, thickly covered with long black pubescence, which is most sparing on the disk of the thorax; the metathorax rugose; wings dark fuscous, the posterior pair being subhyaline towards their base. Abdomen ovate, attached by a short petiole, and very smooth and shining.

Hab. Nova Scotia; California; Rocky Mountains.

71. AMMOPHILA PROCERA.

Ammophila procera, *Dahlb. Hym. Europ.* i. 15.
St. Farg. Hym. iii. 376. 16.

Hab. North America.

72. AMMOPHILA VIOLACEIPENNIS.

Ammophila violacei-pennis, *St. Farg. Hym.* iii. 370. 10.

Hab. Philadelphia.

73. AMMOPHILA APICALIS.

Ammophila apicalis, *Guér. Icon. Règ. Anim.* iii. p. 435. t. 70. f. 3.

Hab. Cuba.

Genus 2. MISCUS.

Miscus, *Jurine, Hym.* i. 130 (1807).
Ammophila, pt., *Latr. Gen. Crust. et Ins.* iv. (1809).
Sphex, pt., *Zett. Ins. Lapp.* p. 436 (1840).

1. MISCUS CAMPESTRIS.

Ammophila campestris, *Latr. Gen. Crust. et Ins.* iv. 54.
St. Farg. & Serv. Ency. Méth. x. 453. 3.
Curtis, Brit. Ent. xiii. t. 604.

Miscus campestris, *Van d. Lind. Obs.* i. 93. 1.
Shuck. Foss. Hym. 80. 1.
Dahlb. Hym. Europ. i. 7. 9.
St. Farg. Hym. iii. 386. t. 30. f. 5.
Steph. Illust. vii. *Supp.* p. 15. t. 41. f. 4.
Wesm. Hym. Foss. Belg. p. 70. 1.
Sphex campestris, *Zett. Ins. Lapp.* 436. 3.

2. MISCUS NEOXENUS. B.M.

Female. Length 8 lines.—Black: the head smooth, slightly shining, the face densely covered with short silvery pile; a thin silky pile covers the vertex; a central impressed line in front of the anterior stemma extending to the insertion of the antennæ; the clypeus has a shining naked space in the middle anteriorly. Thorax: the pro- and mesothorax subrugose and thinly covered with short white silky pubescence; the scutellum longitudinally rugose; the enclosed space on the metathorax obliquely striated, the sides have a thin silky short white pubescence; the sides of the breast and the tubercles densely covered with bright glittering silvery pubescence; the wings subhyaline, the nervures fuscous; the stigma, extreme base of the wings and the tegulæ behind pale ferruginous. Abdomen ferruginous, the three apical segments black.

The male resembles the female, but is more pubescent, the body and legs are entirely covered with short silky pile, and the head and thorax have a thin scattered long white pubescence; the first joint of the petiole black.

Hab. North China (Shanghai).

Genus 3. COLOPTERA.

Coloptera, *St. Farg. Hym.* iii. 387. 1.

1. COLOPTERA BARBARA.

Coloptera Barbara, *St. Farg. Hym.* iii. 387. 1.
Lucas, Explo. Sc. Algér. iii. 276. t. 14. f. 9.

Hab. Algeria (Oran).

2. COLOPTERA PROXIMA.

Female. Length 13 lines.—Black: the clypeus anteriorly, the scape and the mandibles ferruginous; four or five of the basal joints of the flagellum fusco-ferruginous; the tips of the mandibles black; the clypeus truncate, the angles acute; the

sides of the face densely covered with pale golden pile. Thorax: the pro- and mesothorax above ferruginous and transversely striated; the anterior margin of the mesothorax covered with golden pile, a black stripe running down the middle; the scutellum and post-scutellum longitudinally striated, the metathorax obliquely so; the sides, beyond the enclosed space, finely rugose; the legs fusco-ferruginous, the anterior pair, the intermediate tibiæ, the articulations and beneath being of a brighter red; the wings fuscous and slightly iridescent. Abdomen thinly covered with a fine cinereous pile, the joints of the petiole ferruginous beneath.

Hab. Guinea. (Coll. W. W. Saunders, Esq.)

This insect closely resembles *Ammophila tenuis* and *Beniniensis*, for either of which it might, without an examination of the neuration of the wings, be easily mistaken.

Genus 4. TRIGONOPSIS.

Trigonopsis, *Perty, Del. An. Art.* p. 142 (1830–4).

1. TRIGONOPSIS RUFIVENTRIS. Pl. VI. fig. 1.

Podium rufiventre, *Fabr. Syst. Piez.* 184. 2.
Trigonopsis abdominalis, *Perty, Del. An. Art.* p. 142. t. 27. f. 17.
Hab. ——?

This insect appears to be the *Podium rufiventre* of Fabricius; the large depressed head, the large eyes, and above all the white scutellum, are described in the *Systema Piezatorum*; the latter is not strictly correct, the white being a patch of silvery pubescence beneath the scutellum.

2. TRIGONOPSIS AFFINIS. B.M.

Trigonopsis affinis, *Smith, Ann. & Mag. Nat. Hist.* vii. 31 (1851).

Hab. Brazil (Para).

This species differs from *T. rufiventris* in having the head less depressed, the prothorax much shorter and less attenuated, the metathorax transversely striated, and the anterior and intermediate tibiæ and tarsi ferruginous.

3. TRIGONOPSIS VIOLACEUS. B.M.

Trigonopsis violaceus, *Smith, Ann. & Mag. Nat. Hist.* vii. 31 (1851).

Hab. Brazil (Para).

This species has the head and abdomen violet; the thorax and legs black, with faint tints of blue; the metathorax has a deep central longitudinal channel, which is transversely striated: the sides are rugose; the head, prothorax and wings as in *T. rufiventris*.

Genus 5. PELOPŒUS.

Sphex, pt., *Linn. Syst. Nat.* i. 492 (1761).
Pelopœus, *Latr. Hist. Nat. Ins.* xiii. (1804).
Pepsis, pt., *Illig. Ed. Faun. Etrus.* ii. 94 (1807).
Chalybion, *Dahlb. Hym. Europ.* i. 21 (1845).

1. PELOPŒUS SPIRIFEX. B.M.

Sphex spirifex, *Linn. Syst. Nat.* i. 942. 9.
Fabr. Ent. Syst. ii. 204. 24.
Christ. Hym. 303. t. 30. f. 2.
Sphex Ægyptia, *Linn. Syst. Nat.* i. 942. 10 (var.).
Pelopœus spirifex, *Fabr. Syst. Piez.* 202. 1.
Latr. Gen. Crust. et Ins. iv. 60.
Pal. de Beauv. Ins. Afric. et Amér. 49. 7. 3.
Duméril, Consid. 212. t. 32. f. 5.
Van d. Lind. Obs. 95. 1.
Brullé, Expéd. Sc. de Morée, iii. 307. 814; *Hist. Nat. Il. Canar.* iii. 92. 60.
Dahlb. Hym. Europ. i. 22. 1.
St. Farg. Hym. iii. 305. 1.
Eversm. Bull. Mosc. xxi. 249.
Lucas, Explo. Sc. Algér. iii. 273. t. 14. f. 10.

Hab. Europe; North Africa.

2. PELOPŒUS DESTILLATORIUS. B.M.

Sphex spirifex, *Sulzer, Hist. Ins.* t. 27. f. 2 (nec *Linn.*).
Schæff. Icon. Ins. Ratisb. t. 38. f. 1.
Panzer, Faun. Germ. 76. 15.
Pepsis destillatorius, *Illig. Ed. Faun. Etrus.* ii. 94.
Pelopœus destillatorius, *Latr. Gen. Crust. et Ins.* iv. 60. 2.
Van d. Lind. Obs. i. 96. 2.
Dahlb. Hym. Europ. i. 22. 2.
Eversm. Bull. Mosc. xxi. 249 (1848).

Hab. France; Italy; Germany; Sicily; Russia.

3. Pelopœus femoratus. B.M.

Sphex femorata, *Fabr. Ent. Syst.* ii. 202. 16.
Pepsis femorata, *Fabr. Syst. Piez.* 212. 20.
Spin. Ins. Lig. i. 72. 5.
Pelopœus femoratus, *Latr. Gen. Crust. et Ins.* iv. 61.
Van d. Lind. Obs. i. 97. 5.
St. Farg. Hym. iii. 322. 23.
Chalybion femoratus, *Dahlb. Hym. Europ.* i. 433. 4.

Hab. Italy; Albania; Geneva.

4. Pelopœus tubifex.

Sphex spirifex, var. β, *Rossi, Faun. Etrus.* ii. 61. t. 2. f. 13.
Pelopœus tubifex, *Latr. Gen. Crust. et Ins.* iv. 61.
Van d. Lind. Obs. i. 96. 4.
St. Farg. Hym. iii. 314. 14.

Hab. Albania.

5. Pelopœus pensilis. B.M.

Pepsis pensilis, *Illig. Ed. Faun. Etrus.* ii. 94.
Pelopœus pensilis, *Latr. Gen. Crust. et Ins.* iv. 60. 3.
Van d. Lind. Obs. i. 96. 3.
St. Farg. Hym. iii. 306. 3. t. 29. f. 2.
Lucas, Explo. Sc. Algér. iii. 273. t. 14. f. 10.

Hab. Central Europe; Albania; Portugal; North Africa (Oran).

6. Pelopœus Sardonius.

Pelopœus Sardonius, *St. Farg. Hym.* iii. 308. 5.

Hab. Sardinia.

7. Pelopœus violaceus. B.M.

Sphex violacea, *Fabr. Ent. Syst.* ii. 201. 12.
Pepsis violacea, *Fabr. Syst. Piez.* 211. 16.
Chalybion violaceum, *Dahlb. Hym. Europ.* i. 432. 1.
Pelopœus flebilis, *St. Farg. Hym.* iii. 321. 22.

Hab. Smyrna; Constantinople.

8. Pelopœus Arabs. B.M.

Pelopœus arabs, *St. Farg. Hym.* iii. 309. 7.

Hab. Arabia; Turkey.

9. Pelopœus tibialis. B.M.

Sphex tibialis, *Fabr. Ent. Syst.* ii. 202. 17..
Pepsis tibialis, *Fabr. Syst. Piez.* 212. 21.
St. Farg. Hym. iii. 323. 24.

Hab. Cape of Good Hope.

10. Pelopœus chalybeus. B.M.

Female. Length 8 lines.—Deep blue: head strongly and closely punctured; the clypeus convex; the mandibles and one or two of the basal joints of the flagellum obscurely ferruginous. Thorax: the pro- and mesothorax with a central longitudinal impressed line, sparingly punctured and shining; wings black, with a violet iridescence; the metathorax blue-green, closely punctured, the apex rugose. Abdomen smooth and shining.

The male has the antennæ and mandibles black, or the latter very obscurely ferruginous in the middle, the metathorax concolorous, and the tarsi obscurely rufo-testaceous.

Hab. Port Natal; the Gambia.

11. Pelopœus fuscipennis. B.M.

Female. Length 9½ lines.—Head and thorax black; the face thinly covered with griseous down and finely punctured; the mandibles, clypeus anteriorly, and the antennæ ferruginous; five or six of the apical joints of the flagellum black. Thorax: the pro- and mesothorax, as well as the scutellum, shining and sparingly punctured, each having a central depression; the metathorax transversely wrinkled, coarsely so at the apex; wings dark fuscous, with a purple iridescence; the tegulæ violet; the legs ferruginous, the posterior femora and tibiæ more or less fuscous above. Abdomen purple, the petiole ferruginous towards the base.

Hab. Sierra Leone. (The Rev. D. F. Morgan.)

12. Pelopœus hemipterus. B.M.

Sphex hemiptera, *Fabr. Ent. Syst. Supp.* 244. 11.
Pelopœus hemipterus, *Fabr. Syst. Piez.* 204. 7.
Dahlb. Hym. Europ. i. 23. 4.
St. Farg. Hym. iii. 311. 10.

Hab. Isle of France; Africa.

13. Pelopœus lætus. Pl. VII. fig. 1. B.M.

Female. Length 10–12 lines.—Black: the face densely clothed with golden pile, the head having a thin pale yellow pubescence;

the antennæ yellow, five or six of the apical joints black or fuscous; the mandibles ferruginous. Thorax: the collar, tegulæ, a stripe beneath the wings, the scutellum, post-scutellum, apex of the metathorax and the legs yellow; the scutellum and post-scutellum longitudinally striated; the metathorax with a central longitudinal depression, obliquely striated; the anterior and intermediate coxæ and trochanters, the posterior coxæ at their base, and the apical half of the posterior femora, black; the extreme base of the posterior tibiæ, their apex, and also the apical joint of the posterior tarsi, black; the wings hyaline, the nervures pale ferruginous. Abdomen: the petiole, the first segment, the fourth segment more or less, and the fifth and sixth entirely yellow.

Male. Length 9 lines.—Differs only in having the yellow parts paler and brighter.

Hab. Australia (Port Essington; Macintyre River; Swan River); Ceram.

Specimens received from Swan River have the yellow spots on the scutellum and metathorax nearly or quite obsolete.

14. Pelopœus formosus. B.M.

Female. Length 8½ lines.—Black: the clypeus, scape, and four basal joints of the flagellum yellow: the latter are black at the sides; the mandibles ferruginous; the face clothed with golden pile. Thorax: the collar, tegulæ, a stripe beneath the wings, the scutellum, a spot on each side of the metathorax at its base, a larger one at its apex, and two oblong approximate spots in the middle, yellow; the meso- and metathorax transversely striated; the legs yellow; the coxæ black, the intermediate and posterior pairs spotted with yellow; the trochanters black, the intermediate and posterior pairs yellow at their apex; the extreme base of the anterior and intermediate femora, the posterior pair, except their base and apex, black; wings hyaline, the anterior pair fuscous at their tips, the nervures ferruginous. Abdomen: the petiole, the first segment, the fourth more or less, and the fifth and sixth entirely yellow.

Hab. Australia.

15. Pelopœus Bengalensis. B.M.

Chalybion Bengalensis, *Dahlb. Hym. Europ.* i. 433. 2.
Pelopœus violaceus, *St. Farg. Hym.* iii. 321. 22.
Chalybion pruinosus, *Dahlb. Hym. Europ.* i. 433 (var.).

Hab. India (Madras, Bengal); Philippine Islands; China; Isle of France.

16. PELOPŒUS JAVANUS. B.M.

Pelopœus Javanus, *St. Farg. Hym.* iii. 309. 6.
Hab. Java.

17. PELOPŒUS MADRASPATANUS. B.M.

Sphex Madraspatana, *Fabr. Ent. Syst.* ii. 204. 25.
Pelopœus Madraspatanus, *Fabr. Syst. Piez.* 203. 3.
Dahlb. Hym. Europ. i. 22. 3.

Hab. Malabar; Madras; Nepaul; Bengal.

18. PELOPŒUS SOLIERI.

Pelopœus Solieri, *St. Farg. Hym.* iii. 318. 18.

Hab. India. (Coll. W. W. Saunders, Esq.)

19. PELOPŒUS SPINOLÆ. B.M.

Pelopœus Spinolæ, *St. Farg. Hym.* iii. 307. 4.

Hab. Bombay; Ceylon.

20. PELOPŒUS DEFORMIS. B.M.

Female. Length 8 lines.—Black: the clypeus and scape in front yellow; the anterior margin of the clypeus and the mandibles ferruginous; the face covered with golden pile, the head thinly covered with long pale pubescence. Thorax: the posterior margin of the prothorax, the tegulæ, a stripe beneath the wings and another on the scutellum, a small spot on each side of the metathorax at the base and a larger spot at its apex, yellow; the meso- and metathorax transversely striated; the anterior and intermediate tibiæ yellow in front; the posterior tibiæ within and all the femora beneath ferruginous. Abdomen: the petiole black; the first segment entirely and the apical margins of the following segments of a reddish-yellow: the wings subhyaline, their nervures ferruginous.

Hab. North China. (Coll. R. Fortune, Esq.)

21. PELOPŒUS COROMANDELICUS. B.M.

Pelopœus Coromandelicus, *St. Farg. Hym.* iii. 306. 2.
Pelopœus fuscus, *St. Farg. Hym.* iii. 311. 9 (var.).

Hab. Coromandel; Central India.

22. PELOPŒUS PICTUS.

Male. Length 7½ lines.—Black: the face clothed with short silvery pubescence; the scape in front and the tips yellow. Tho-

rax: the collar, tegulæ, a stripe beneath the wings, the scutellum and post-scutellum yellow; a spot on each side of the metathorax at its base, the whole of the posterior portion above, and a broad stripe on each side of the enclosed portion uniting behind, yellow; the mesothorax obliquely striated inwardly; the wings slightly coloured, their tips fuscous; the anterior and intermediate legs yellow, the coxæ, trochanters and base of the femora black, the apical joints of the tarsi fusco-ferruginous; the posterior legs black; the tips of the coxæ, the trochanters, base of the femora and tibiæ, and the basal joint of the tarsi, yellow, the apical joints of the latter fusco-ferruginous. Abdomen black, the petiole yellow.

Hab. India. (Coll. W. W. Saunders, Esq.)

It is possible that this may prove to be only a highly-coloured local variety of *P. Madraspatanus*.

23. PELOPŒUS RUFOPICTUS. B.M.

Female. Length 8 lines.—Black: the head and thorax thinly covered with pale fulvous pubescence; the face thinly covered with golden pile; the scape of the antennæ, the clypeus and mandibles, ferruginous; the apex of the third and fourth joints of the antennæ ferruginous beneath, the base of the latter black. Thorax: a line on the collar, a transverse spot on the scutellum, the apex of the metathorax, and a spot on each side of the metathorax at its base, reddish-yellow; the legs ferruginous, the coxæ and trochanters black; the meso- and metathorax transversely striated; the wings yellow-hyaline, the nervures and tegulæ ferruginous; the apex of the superior wings with a fuscous cloud. Abdomen: the petiole black and curved; the first segment, the apical margins of the second, fourth and fifth with a narrow fascia, and the apical margin of the third with a broad band, reddish-yellow; the apical segment ferruginous.

Hab. Celebes.

This species closely resembles the *P. difformis* from North China, but it differs too much in colouring to justify its being considered a mere variety.

24. PELOPŒUS CÆRULEUS. B.M.

Sphex cærulea, *Linn. Syst. Nat.* i. 941. 2.
Sphex cyanea, *Fabr. Ent. Syst.* ii. 201. 13.
De Geer, Ins. iii. 589. 6. t. 30. f. 6.
Pepsis cyanea, *Fabr. Syst. Piez.* 211. 17.
Chalybion cyaneum, *Dahlb. Hym. Europ.* i. 22. 3.
Pelopœus cæruleus, *St. Farg. Hym.* iii. 320. 20.

Hab. North America; Carolina; East Florida.

25. PELOPŒUS FLAVIPES. B.M.

Sphex flavipes, *Fabr. Ent. Syst.* ii. 202. 18.
Pelopœus flavipes, *Fabr. Syst. Piez.* 204. 9.
Pelopœus architectus, *St. Farg. Hym.* iii. 313. 12.

Hab. North America.

This species varies in having the apex of the metathorax more or less yellow, and sometimes entirely black; the latter variety is the *P. architectus* of St. Fargeau.

26. PELOPŒUS SERVILLEI.

Pelopœus Servillei, *St. Farg. Hym.* iii. 313. 13.

Hab. New Orleans.

27. PELOPŒUS CANADENSIS. B.M.

Male. Length 8 lines.—Black: the face clothed with short silvery pubescence; the clypeus produced and notched in the middle; the tips of the mandibles ferruginous; the scape yellow. Thorax: a subinterrupted line on the collar, the tegulæ, a spot on the scutellum and post-scutellum, and two spots at the apex of the metathorax, yellow; the metathorax transversely striated, with a deep longitudinal channel in the enclosed portion of the metathorax; the mesothorax finely rugose, running into striæ towards the scutellum, over which the striæ also run; wings slightly coloured, their tips fuscous, the nervures ferruginous; the apex of the anterior femora, the tibiæ and tarsi, yellow, two or three of the apical joints of the latter fuscous; the posterior tibiæ at their base and the three basal joints of the tarsi yellow. Abdomen: the dilated portion of the petiole yellow on each side.

Hab. Canada.

28. PELOPŒUS FISTULARIS. B.M.

Pelopœus fistularis, *Dahlb. Hym. Europ.* i. 23. 8.
Pelopœus histrio, *St. Farg. Hym.* iii. 316. 16.,
Erichs. Faun. et Fl. Brit. Guiana, iii. 588.

Hab. Brazil; Cayenne.

29. PELOPŒUS BIMACULATUS. B.M.

Pelopœus bimaculatus, *St. Farg. Hym.* iii. 319. 19.

Hab. Cayenne; Columbia.

This is in all probability a variety of *P. figulus*.

30. PELOPŒUS FIGULUS. B.M.

Pelopœus figulus, *Dahlb. Hym. Europ.* i. 23. 6.
Pelopœus vindex, *St. Farg. Hym.* iii. 317. 17.
Erichs. Faun. et Fl. Brit. Guiana, iii. 588.

Hab. Cayenne; Rio Grande; Honduras; St. Domingo; British Guiana.

31. PELOPŒUS CEMENTARIUS. B.M.

Sphex cementaria, *Drury, Exot. Ins.* i. 105. t. 44. f. 6, 8.
Sphex flavipunctata, *Christ. Hym.* 301. t. 30. f. 1.
Sphex lunata, *Fabr. Ent. Syst.* ii. 203. 20.
Pelopœus lunatus, *Fabr. Syst. Piez.* 203. 4.
Pal. de Beauv. Ins. Afric. et Amér. 50. t. 7. f. 4.
Guér. Icon. Règ. Anim. p. 436. t. 70. f. 5.
Dahlb. Hym. Europ. i. 23. 5.
St. Farg. Encycl. Méth. x. 35. 5; *Hym.* iii. 312. 11.
Guêpe Ichneumon, *De Geer, Ins.* iii. 588. 4. t. 30. f. 4.
Pelopœus affinis, *Fabr. Syst. Piez.* 204. 5 (var.).

Hab. Antigua; St. Christopher's; Jamaica; St. Domingo; Cayenne.

32. PELOPŒUS FASCIATUS. B.M.

Pelopœus fasciatus, *St. Farg. Hym.* iii. 315. 15.

Hab. St. Domingo.

33. PELOPŒUS JAMAICENSIS.

Sphex Jamaicensis, *Fabr. Ent. Syst.* ii. 203. 22.
Pelopœus Jamaicensis, *Fabr. Syst. Piez.* 204. 6 (var. *P. lunatus*?).

Hab. Jamaica.

34. PELOPŒUS CHILENSIS.

Pelopœus Chilensis, *Spin. Gay's Chili,* vi. 395. 1.

Hab. Chili.

Genus 6. PODIUM.

Pepsis, pt., *Fabr. Syst. Piez.* 210 (1804).
Podium, *Fabr. Syst. Piez.* 183, 30 (1804).

1. PODIUM RUFIPES. B.M.

Podium rufipes, *Fabr. Syst. Piez.* 183. 1.
Latr. Gen. Crust. et Ins. iv. 59.
Dahlb. Hym. Europ. i. 24.

Hab. South America; St. Domingo.

2. PODIUM LUTEIPENNIS. Pl. VI. fig. 2. B.M.

Pepsis luteipennis, *Fabr. Syst. Piez.* 210. 10.
Podium flavipenne, *Latr. Gen. Crust. et Ins.* iv. 59.
St. Farg. Encycl. Méth. x. 164. 1.
Podium luteipenne, *Dahlb. Hym. Europ.* i. 23.
St. Farg. Hym. iii. 324. 2.
Podium Latreillei, *Spin. Mem. Accad. Torino*, xiii. ser. 2. p. 51.

Hab. Brazil (Para); Cayenne.

3. PODIUM CONSANGUINEUM. B.M.

Female. Length 8¼ lines.—Black and shining: the face strongly punctured, the vertex sparingly and delicately so. Thorax strongly punctured, the punctures distant on the mesothorax and scutellum, which are highly polished; the anterior and intermediate femora, tibiæ and tarsi ferruginous; the femora black at their base, the tibiæ and tarsi fuscous above; wings flavo-hyaline, the nervures and tegulæ pale ferruginous; the calcariæ ferruginous. Abdomen smooth, shining and impunctate.

Hab. South America.

4. PODIUM HÆMATOGASTRUM. B.M.

Podium hæmatogastrum, *Spin. Mem. Accad. Torino*, xiii. 50. 33.

Hab. Brazil (Para; Tapajos).

5. PODIUM NITIDUM. B.M.

Podium nitidum, *Spin. Mem. Accad. Torino*, xiii. 49. 32.

Hab. Brazil (Para).

6. PODIUM LUCTUOSUM.

Female. Length 10 lines.—Black: head and thorax shining, finely and distantly punctured; the metathorax closely punctured; the head, thorax and petiole covered with long black pubescence; the tips of the mandibles, tibiæ, tarsi, and apex of the femora, ferruginous; wings dark brown with a violet iridescence; the abdomen smooth, shining and impunctate.

Hab. North Carolina. (Coll. F. Smith.)

7. PODIUM OPALINUM. B.M.

Female. Length 6½ lines.—Black: the head shining and delicately punctured, with a thinly scattered long black pubescence. Thorax: the mesothorax and scutellum highly polished, and having a few scattered delicate punctures; the metathorax closely punctured; in the centre a deeply impressed longitudinal channel; the thorax, coxæ and trochanters, and also the petiole of the abdomen, with thinly scattered long black hairs; the anterior wings fuscous, with a brilliant violet iridescence and two fasciæ, the first crossing at the apex of the externo-medial cell, the second passing over the second submarginal cell; the posterior wings hyaline, with their apex slightly fuscous. The abdomen has a brilliant opaline iridescence.

Male. Length 6 lines.—This sex only differs in having the wings paler and the anterior tibiæ rufo-testaceous in front.

Hab. Jamaica.

This species appears to approach very closely to the *Ammophilus fumigatus* of Perty.

8. PODIUM COMPLANATUM.

Female. Length 10 lines.—Shining jet-black: the head compressed, sparingly and delicately punctured; the anterior margin of the clypeus emarginate. The prothorax elongate, the sides rounded, convex above, impunctate; the mesothorax, scutellum and post-scutellum impunctate; the metathorax flattened, longitudinally strigose-punctate at the base in the middle, the apical half with scattered delicate punctures; a central longitudinal slightly impressed line terminates in a fasciolet near the apex; the wings hyaline, with a narrow dark fascia crossing at the second submarginal cell, and a fuscous stain traversing the externo-medial nervure; the legs smooth and shining. Abdomen: flattened, highly polished and impunctate; the petiole bent, curving upwards.

Hab. South America. (Coll. W. W. Saunders, Esq.)

9. PODIUM DENTICULATUM.

Female. Length 8 lines.—Black: the face closely, the vertex distantly and delicately punctured; the clypeus armed with six acute teeth on its anterior margin; the sides of the face have a short silvery pubescence, the vertex and cheeks thinly clothed with long silvery hairs. Thorax: the mesothorax and scutellum have a few delicate scattered punctures and are smooth and shining; the metathorax, the sides and beneath more strongly and closely punctured; the prothorax has a central depression on its

posterior margin, and the mesothorax an abbreviated one at its base; the sides and the metathorax with a thinly scattered silvery-white pubescence; the anterior and intermediate tibiæ and the femora at their apex ferruginous, the extreme base of the posterior tibiæ ferruginous; wings hyaline, the superior pair have a fuscous fascia occupying the second submarginal cell; a fuscous stain traverses the posterior margin of the externo-medial cell; the apex of the wings is faintly clouded. Abdomen smooth, shining and impunctate.

Male.—This sex is rather smaller, more slender and pubescent; the clypeus is only armed with two teeth, which are longer than in the other sex and more acute; the abdomen is covered with a fine silky pilosity.

Var. *a*. The anterior and intermediate tibiæ obscurely ferruginous.

Hab. Brazil. (Coll. F. Smith.)

Genus 7. STETHORECTUS.

Podium, *Westw. Griff. An. Kingd.* xv. 516 (1832).
Stethorectus, *Smith, Ann. & Mag. Nat. Hist.* xx. 394 (1847).

1. STETHORECTUS INGENS. B M.

Stethorectus ingens, *Smith, Ann. & Mag. Nat. Hist.* xx. 394. t. 23. f. 1 ♀, 2 ♂.
Podium giganteum, *Erichs. Faun. et Fl. Brit. Guiana*, iii. 589?

Hab. Brazil (Para); British Guiana.

2. STETHORECTUS NIGRIPES. B.M.

Podium nigripes, *Westw. Griff. An. Kingd.* xv. 516. t. 76. f. 3.

Hab. Brazil.

Genus 8. CHLORION.

Sphex, pt., *Fabr. Ent. Syst.* ii. 206 (1793).
Chlorion, pt., *Latr. Hist. Nat. des Crust. et Ins.* iii. (1804).
Pronæus, *Saund. Trans. Ent. Soc.* iii. 58 (1841).

1. CHLORION LOBATUM. B.M.

Sphex lobata, *Fabr. Ent. Syst.* ii. 206. 30.
Chlorion lobatum, *Latr. Gen. Crust. et Ins.* iv. 57.
Dahlb. Hym. Europ. i. 24. 1.
St. Farg. Hym. iii. 330. 3.

Chlorion azureum, *St. Farg. Encycl. Méth.* x. 451. 2; *Hym.* iii. 329. 1.

Hab. India; China.

An examination of a large number of specimens from various parts of India and China shows that this insect is very inconstant in colour, varying from brassy or golden green to dark blue; and the colour of the mandibles varies from ferruginous to black: no specific difference appears to exist.

2. CHLORION CÆRULEUM. B.M.

Sphex cærulea, *Drury, Exot. Ins.* ii. 75. t. 39. f. 8.
Chlorion cyaneum, *Dahlb. Hym. Europ.* i. 24. 1.

Hab. North America; Mexico.

3. CHLORION SPLENDIDUM. B.M.

Chlorion splendidum, *Fabr. Syst. Piez.* 218. 5.
Smith, Ann. & Mag. Nat. Hist. vii. 32 (1851).
Pronæus Campbellii, *Saund. Trans. Ent. Soc. Lond.* iii. 58. t. 5. f. 1 ♀.
Sphex pulchra, *St. Farg. Hym.* iii. 355. 31 ♂.

Hab. Northern India.

4. CHLORION VIRIDI-CÆRULEUM. B.M.

Chlorion viridi-cæruleum, *Encycl. Méth.* x. 451. 1; *Hym.* iii. 330. 2.

Hab. Cayenne.

5. CHLORION MELANOSOMA. B.M.

Female. Length 13–17 lines.—Black: the mandibles and clypeus, the scape and four or five of the basal joints of the flagellum ferruginous; the apical joints of the flagellum fuscous; the anterior tibiæ and tarsi ferruginous; the wings yellow, the apical margins of the anterior pair dark fuscous, the posterior margin of the hinder wings with a pale fuscous border, the nervures pale ferruginous, the tegulæ ferruginous behind. Thorax with scattered black pubescence; the prothorax transversely striated in front, elevated and deeply notched in the middle behind; the mesothorax smooth and shining, with an impressed line on each side over the tegulæ; the metathorax transversely striated; the abdomen smooth and shining; sometimes the abdomen has a chalybeous tint.

Hab. India (Pondicherry).

6. CHLORION RUGOSUM. B.M.

Male. Length 8–9 lines.—Head brassy-green, the margin of the vertex and the cheeks with long white pubescence; the face anteriorly thickly covered with short silvery-white pubescence; the vertex is very finely and very closely punctured, the face longitudinally rugose. Thorax rugose; the prothorax finely roughened, the mesothorax transversely rugose in front and obliquely so behind; the sides of the thorax coarsely strigose, the pectus with scattered shallow punctures; the tibiæ and tarsi black; the metathorax transversely coarsely striated; the wings fusco-hyaline, their apical margins with a dark fuscous border; abdomen smooth, shining and impunctate. The pro- and meso-thorax brassy-green, the metathorax blue-green.

Hab. Sumatra.

Genus 9. PRONÆUS.

Dryinus, pt., *Fabr. Syst. Piez.* 200 (nec *Latr.*) (1804).
Pepsis, pt., *Pal. de Beauv. Ins. Afric. et Amér.* 39. t. 1. f. 1 (1805).
Pronæus, *Latr. Gen. Crust. et Ins.* iv. 56 (1809).

The genus *Pronæus* very closely approaches to *Chlorion*,—in fact contains its African representatives, which only differ from the Indian group in having the labial and maxillary palpi longer; the number of joints are the same, and the neuration of the wings identical; the antennæ of the males are grooved longitudinally, as in the genera *Chlorion* and *Sphex*.

1. PRONÆUS MANDIBULARIS. B.M.

Chlorion mandibulare, *Fabr. Syst. Piez.* 218. 3 ♀.
Pronæus apicalis, *Guér. Voy. Abyss.* (*Lefeb.*) vi. 357, *Atlas*, t. 8. f. 5 & 6 ♂.

Hab. Guinea; Abyssinia; West Africa (Whydah).

2. PRONÆUS MAXILLARIS. B.M.

Pepsis maxillaris, *Pal. de Beauv. Ins. Afric. et Amér.* 39. t. 1. f. 1 ♀.
Pronæus maxillaris, *Latr. Gen. Crust. et Ins.* iv. 56.
St. Farg. Hym. iii. 331. 1. t. 30. f. 1.

Hab. Africa.

3. PRONÆUS ÆNEUS.

Dryinus æneus, *Fabr. Syst. Piez.* 200. 1.
Pronæus æneus, *Latr. Gen. Crust. et Ins.* iv. 56.
Dahlb. Hym. Europ. i. 24. 1.

Hab. Guinea; Port Natal.

4. PRONÆUS INSTABILIS. B.M.

Female. Length 15–20 lines.—Head black; the inner orbit narrowly and the outer orbit of the eyes broadly rufo-testaceous; the antennæ and face anteriorly rufo-testaceous, the mandibles ferruginous; the head is sometimes rufo-testaceous, with merely a black stain enclosing the ocelli; the mandibles fringed beneath with long hairs. Thorax of an obscure blue-black; sometimes the metathorax is tinged with green; the pro- and mesothorax more or less rufo-testaceous, rarely quite black; the wings nigro-cæruleous; the legs pale ferruginous, the coxæ and trochanters black or fuscous; the abdomen blue with purple iridescence, the apical segment pale ferruginous: in some examples the apical margins of the second and following segments are more or less rufo-piceous.

Male. Length 11 lines.—The male has the antennæ pale fulvous; the head, pro- and mesothorax above, the tegulæ and legs pale ferruginous; the three apical segments of the abdomen are also pale.

Hab. Africa (Guinea; Congo).

5. PRONÆUS AFFINIS. B.M.

Female. Length 17 lines.—Black: the labrum, anterior margin of the clypeus, the mandibles and antennæ, ferruginous. Thorax clothed above with a short black velvety pubescence; the prothorax with a broad, longitudinal, shallow impressed line or channel; wings as in *P. instabilis*; the tibiæ, tarsi and tips of the femora ferruginous; abdomen obscure blue-black, the apical segment ferruginous.

Male. Length 12 lines.—Thorax and abdomen as in the female; the antennæ, mandibles and legs pale ferruginous; the coxæ, trochanters and base of the femora black.

Hab. Port Natal.

Genus 10. SPHEX.

Sphex, pt., *Fabr. Ent. Syst.* ii. 198 (1793).
Pepsis, pt., *Fabr. Syst. Piez.* 207 (1804).

The genus *Sphex*, as treated in this Catalogue, contains those species only which possess the characteristics of the *Sphex flavipennis* of Fabricius.

Head as wide as the thorax; eyes ovate; antennæ filiform, inserted near the base of the clypeus, grooved more or less longitudinally in the males, inserted near the base of the clypeus; mandibles large and arcuate, bidentate within, the teeth notched at their base, forming a rudimentary tooth; the apical tooth acuminate. Thorax elongate-ovate, truncated behind; the collar transverse; the anterior wings with one marginal and three submarginal cells; the marginal cell elongate, rounded at its apex; the first submarginal cell as long as the two following; the second more or less obliquely quadrate, *receiving the first recurrent nervure at or near its apex*; the third forming a truncated triangle, its posterior margin more or less rounded, receiving the second recurrent nervure about the middle; the anterior tarsi ciliated in the females; *the claws bidentate* beneath at their base. Abdomen conically ovate.

1. SPHEX FLAVIPENNIS. B.M.

Sphex flavipennis, *Fabr. Ent. Syst.* ii. 201. 10.
Latr. Hist. Nat. xiii. 293. 3.
Jurine, Hym. 129. t. 8. gen. 5. fam. 2.
Ahrens, Faun. Europ. 4. 18.
Van d. Lind, Obs. i. 94. 1.
Shuck. Foss. Hym. iii. 349. 1.
St. Farg. Hym. iii. 349. 23.
Lucas, Explo. Sc. Algér. iii. 271.
Sphex maxillosa, *Fabr. Ent. Syst.* ii. 208. 37.
Dahlb. Hym. Europ. i. 26. 9.
Lucas, Explo. Sc. Algér. iii. 271.
Pepsis flavipennis, *Fabr. Syst. Piez.* 210. 13.
Pepsis maxillosa, *Fabr. Syst. Piez.* 213. 27.
Sphex triangulum, *Brullé, Expéd. Sc. Morée*, iii. 365. 807, *Atlas*, t. 50. f. 6 ♀.
Sphex rufo-cincta, *Brullé, Expéd. Sc. Morée*, iii. 367. 809, *Atlas*, t. 50. f. 7 ♂.

Hab. Britain?; France; Italy; Germany; Greece; Portugal; The Morea; Algeria.

An examination of a number of specimens shows that the colour of the pubescence on the face of this insect varies; it is usually silvery, but in some examples inclines to a golden tint; the latter is the colour described by Fabricius.

2. SPHEX OCCITANICA.

Sphex Occitanica, *St. Farg. et Serv. Encycl. Méth.* x. 462. 1 ♂.
St. Farg. Hym. iii. 348. 21.

Hab. Montpellier.

This is probably a variety of the male of *Sphex emarginata* of Brullé, the principal difference being that the second segment of the abdomen is more red than in any example which has been received of that species.

3. SPHEX PRODITOR.

Sphex proditor, *St. Farg. Hym.* iii. 354. 29.

Hab. Corsica.

4. SPHEX EMARGINATA.

Sphex argyria, *Brullé, Expéd. Sc. Morée*, iii. 367. 810. t. 50. f. 8 ♀.
Sphex emarginata, *Brullé, Expéd. Sc. Morée*, iii. 368. 811, *Atlas*, t. 50. f. 9 ♂.

Hab. The Morea; Albania. (Coll. S. S. Saunders, Esq.)

5. SPHEX LEUCONOTA.

Sphex leuconota, *Brullé, Expéd. Sc. Morée*, iii. 366. 808.

Hab. The Morea.

6. SPHEX SUBFUSCATA.

Sphex subfuscata, *Dahlb. Hym. Europ.* i. 436. 4.

Hab. Turkey.

7. SPHEX FERA.

Sphex fera, *Dahlb. Hym. Europ.* i. 26. 8.

Hab. Greece.

8. SPHEX PRUINOSA.

Sphex pruinosa, *Germ. Reise Dalm.* 261. 348.
Van d. Lind, Obs. i. 94. 3.

Hab. Dalmatia.

9. SPHEX BICOLOR.

Sphex bicolor, *Dahlb. Hym. Europ.* i. 437. 17.

Hab. Dalmatia.

10. SPHEX CONFINIS.
Sphex confinis, *Dahlb. Hym. Europ.* i. 437. 16.
Hab. Dalmatia.

11. SPHEX CINEREO-RUFO-CINCTA.
Sphex cinereo-rufo-cincta, *Dahlb. Hym. Europ.* i. 438. 19.
Hab. Rhodes.

12. SPHEX SOROR.
Sphex soror, *Dahlb. Hym. Europ.* i. 436. 7.
Hab. Rhodes.

13. SPHEX SORDIDA.
Sphex sordida, *Dahlb. Hym. Europ.* i. 436. 3.
Hab. Rhodes.

14. SPHEX SOLIERI.
Sphex Solieri, *St. Farg. Hym.* iii. 354. 28.
Hab. ——?

15. SPHEX FUSCATA.
Sphex fuscata, *Dahlb. Hym. Europ.* i. 25. 2.
Hab. ——?

16. SPHEX FUSCA.
Sphex fusca, *St. Farg. Hym.* iii. 335. 2.
Hab. ——?

17. SPHEX DIVES.
Sphex dives, *St. Farg. Hym.* iii. 359. 36.
Hab. ——?

18. SPHEX HÆMORRHOIDALIS. B.M.
Sphex hæmorrhoidalis, *Fabr. Ent. Syst.* ii. 200. 7, and *Cab. Mus. Linn. Soc.* *Banks.*
Pepsis hæmorrhoidalis, *Fabr. Syst. Piez.* 209. 8.
Hab. Africa.

19. SPHEX CASTANEIPES.

Sphex castaneipes, *Dahlb. Hym. Europ.* i. 27. 12 & 438.

Hab. Africa.

20. SPHEX SUBTRUNCATA.

Sphex subtruncata, *Dahlb. Hym. Europ.* i. 25. 6.

Hab. Africa.

21. SPHEX GRATIOSA. B.M.

Male. Length 12 lines.—The head, antennæ, prothorax, legs and abdomen ferruginous; the meso- and metathorax black; the prothorax black beneath; the mandibles ferruginous, with their tips black; a quadrate black spot on the vertex enclosing the ocelli; the enclosed portion of the metathorax transversely and finely striated, the apical portion of the metathorax transversely sulcated; the wings dark fuscous with a violet iridescence, the tegulæ ferruginous; the petiole and extreme base of the abdomen black: beneath, the second segment has a large fuscous spot at the base.

Hab. Tripoli.

22. SPHEX NIGRITA.

Sphex nigrita, *Lucas, Explo. Sc. Algér.* iii. 271.

Hab. Algeria.

23. SPHEX AFFINIS.

Sphex affinis, *Lucas, Explo. Sc. Algér.* iii. 272.

Hab. Algeria.

24. SPHEX AFRA. B.M.

Sphex afra, *St. Farg. Hym.* iii. 350. 24. t. 30. f. 3 ♀.
Lucas, Explo. Sc. Algér. iii. 270. t. 14. f. 3.

Hab. Algeria (Oran).

25. SPHEX TRICHARGYRA.

Sphex trichargyra, *Spin. Ann. Soc. Ent. Fr.* vii. 466. 11 (1838).

Hab. Egypt.

This is probably a highly coloured example of *Priononyx albisecta*, or certainly a closely allied species.

26. SPHEX OPTIMA.

Female. Length 13 lines.—Black: the face and cheeks densely clothed with rich golden pubescence; on the vertex are scattered a few erect fuscous hairs. The prothorax, sides and hinder margin of the mesothorax above, the tubercles and a spot beneath the wings, clothed with bright golden pubescence; the mesothorax has anteriorly a central, abbreviated, impressed line which is coated with golden pubescence; the post-scutellum has a spot on each side, and the apex of the metathorax is densely clothed with short silvery-white pubescence; there is also a silvery stripe on the sides at the insertion of the posterior coxæ; the metathorax is thinly covered with a changeable glittering pile, observable in different lights; a similar pile also covers the legs; wings yellowish hyaline, their apical margins clouded, the nervures black. Abdomen red, with the petiole and three apical segments black; the third segment has on each side an oblique fuscous line which unites in the middle of the segment; the fourth segment has its apical margin narrowly and obscurely ferruginous; the apical segment rugose.

Hab. Africa (Gambia).

27. SPHEX BOHEMANNI. B.M.

Sphex Bohemanni, *Dahlb. Hym. Europ.* i. 436. 9.

Hab. Port Natal.

28. SPHEX PELOPŒIFORMIS. B.M.

Sphex pelopœiformis, *Dahlb. Hym. Europ.* i. 437. 12.

Hab. Port Natal.

The specific characters given by Dahlbom in his tabular synopsis are scarcely sufficient: in the insect for which Dahlbom's name is adopted, the head and thorax have a thin cinereous pubescence, and are closely punctured, particularly the metathorax; the scape in front, four or five of the basal joints of the flagellum beneath, the clypeus more or less, the mandibles, the coxæ and trochanters, the femora and tibiæ beneath, ferruginous; the wings dark fuscous, with a violet iridescence, the hinder pair pale at their margins towards their base; the petiole elongate; the abdomen oblong and pointed at the apex.

The male has no rufous colouring, but otherwise agrees with the female.

29. SPHEX PRASLINUS.

Sphex Praslinus, *Guér. Voy. Coq. Zool.* pt. 2. p. 262.

Hab. Port Praslin, New Ireland.

30. Sphex cinerascens.

Sphex cinerascens, *Dahlb. Hym. Europ.* i. 25. 3 & 436. 10.

Hab. Guinea.

31. Sphex Dorycus.

Sphex Dorycus, *Guér. Voy. Coq. Zool.* pt. 2. p. 262.

Hab. New Guinea.

32. Sphex pubescens.

Sphex pubescens, *Fabr. Ent. Syst.* ii. 205. 28.
Syst. Piez. 212. 22.

Hab. Guinea.

33. Sphex varipennis.

Sphex varipennis, *Reiche & Fairm. Voy. Fer. & Galin. Abyss.* t. 29. f. 5, 6.
Guér. Voy. Abyss. Lefeb. vi. 354.

Hab. Abyssinia.

34. Sphex eximia.

Sphex eximia, *St. Farg. Hym.* iii. 360. 37.

Hab. Senegal.

35. Sphex Paulinierii.

Sphex Paulinierii, *Guér. Mag. Zool.* 1843, t. 114. f. 1.

Hab. Senegal.

36. Sphex amator.

Male. Length 10 lines.—Black: the face and thorax above densely clothed with short golden pubescence; the mandibles ferruginous in the middle; the wings hyaline, the nervures fusco-ferruginous, the apical margins of the superior wings slightly clouded; the legs have a fine pale silky pile, which is very dense on the posterior tibiæ within; the abdomen has also a fine thin changeable silky pile; beneath, the two apical segments are densely covered with short golden pubescence.

Hab. Australia. (Coll. W. W. Saunders, Esq.)

37. Sphex canescens. B.M.

Female. Length 10 lines.—Black: the face covered with short silvery pubescence, and having, as well as the cheeks, a long

thin cinereous pubescence; a denuded space down the middle of the clypeus, which has a few scattered punctures, its anterior margin rounded; the mandibles rufo-piceous, their apex subacute. Thorax thinly clothed with cinereous pubescence, most sparing on the mesothorax, which is moderately punctured, the punctures most sparing on the disk, and somewhat elongate; the scutellum punctured, and having a depression in the middle; the metathorax opake and finely rugose; wings hyaline, their extreme base and apical margins slightly fuscous, the third submarginal cell much restricted towards the marginal. Abdomen ovate, shining, very convex, and with a fine cinereous pile at the base; the petiole not longer than the first segment; the apical segment rugose.

Male.—Very closely resembles the female, but has the anterior margin of the clypeus widely emarginate; the mesothorax is more closely punctured, and the abdomen not quite so shining; the two apical segments punctured.

Hab. Australia.

38. SPHEX CARBONARIA. B.M.

Female. Length 13–15 lines.—Black: the face clothed with yellowish-white pubescence; a smooth shining space down the centre of the clypeus; the cheeks have a silvery pile, and have, as well as the vertex, a thinly scattered long white pubescence. Thorax: the pro- and mesothorax covered with silvery pubescence; when the pubescence is rubbed off, the mesothorax is found to be closely punctured, as well as the scutellum; the post-scutellum bituberculate; the metathorax clothed with white pubescence; wings hyaline, a pale fuscous spot beyond the marginal cell; the nervures ferruginous. Abdomen smooth and shining; the petiole covered with white pubescence.

Hab. Australia (Sydney).

39. SPHEX CLAVIGERA.

Female. Length 11 lines.—Black: head closely and rather finely punctured, the face densely clothed with silvery pubescence; tips of the mandibles ferruginous. Thorax subopake, closely punctured; the metathorax shagreened and thinly covered with yellowish-white pubescence, the sides of the thorax and beneath have a similar pubescence; the coxæ, trochanters and femora beneath closely punctured; the legs stout and spinose, the spines short and sparing; the wings yellow-hyaline, the apical margins fuscous. Abdomen clavate, smooth and shining, covered, particularly towards the base, with a fine reflective silky pile.

Hab. Australia.

40. SPHEX COGNATA. B.M.

Female. Length 10 lines.—Black: the face densely covered with a rich golden pubescence; the anterior margin of the clypeus produced, subangular, notched in the middle, the lateral angles of the notch produced, forming obtuse teeth. The pro- and mesothorax thinly covered with short golden pubescence; the scutellum naked, the post-scutellum and metathorax covered with silvery-white pubescence; the legs have a fine silky cinereous pile; the posterior tibiæ at their apex within have a short reddish-brown pubescence. Abdomen: the petiole short, scarcely as long as the first segment, at the base covered with a fine changeable silky pile.

Hab. Australia.

This species closely resembles *S. opulenta*, but is distinguished at once by the notch in the margin of the clypeus.

41. SPHEX MODESTA. B.M.

Female. Length 10 lines.—Black: the face densely clothed with silvery pubescence; a denuded space down the middle of the clypeus, which is thinly covered with long stiff black hairs; the mandibles elongate and very acute at their apex. The prothorax with a silvery pubescence, that on the sides of the mesothorax is of the same colour; the disk of the mesothorax and the scutellum closely punctured; the metathorax finely transversely rugose and covered with yellowish-white pubescence; wings hyaline, the anterior pair yellow towards their base, their apex faintly clouded, a fuscous spot beyond the apex of the marginal cell; the extreme base of the wings dark fuscous. Abdomen very smooth, shining and impunctate.

Hab. Australia.

42. SPHEX VESTITA.

Female. Length 13 lines.—Black: the face densely clothed with short golden pubescence; the cheeks have a thin cinereous pile and also some scattered long pale hairs; the vertex and face have a thinly scattered pale pubescence; the mandibles large and prominent, furnished with a stout tooth inside and fringed beneath with long pale hairs. The thorax densely clothed above with golden pubescence, which is more or less obliterated on the scutellum, the latter with a deep central impressed line; the sides of the metathorax and breast covered with golden pubescence; the thorax has a thin golden pile beneath; wings hyaline, faintly clouded at their apical margins, the nervures dark ferruginous. Abdomen blue-black; the first segment and the petiole thinly

covered with golden pile; the second segment opake, with its apical margin and also the following segments smooth and shining.

Hab. Australia. (Coll. F. Smith.)

43. SPHEX VIDUA.

Male. Length 8–8½ lines.—Black: the face and cheeks densely clothed with short bright silvery pubescence; the head, thorax and petiole with long erect yellowish-white pubescence; the mesothorax and scutellum closely punctured; the metathorax, the sides and thorax beneath, finely rugose; wings hyaline, their apex with a fuscous marginal cloud; the nervures black. Abdomen: the petiole rather longer than the first segment, slightly shining and covered with a changeable fine silky pile.

Hab. Australia. (Coll. W. W. Saunders, Esq.)

This is probably the male of *opulenta*.

44. SPHEX FUMIPENNIS. B.M.

Female. Length 10–12 lines.—Black and shining: the face strongly punctured, the vertex sparingly and more finely so; the face covered more or less with silvery pile, and having a number of stiff black hairs on the clypeus. The pro- and mesothorax, as well as the scutellum, moderately punctured; a finely impressed line on each side of the mesothorax over the tegulæ; the metathorax opake and thinly covered with griseous pubescence, that on the prothorax, the sides, and beneath, is a mixture of fuscous and griseous; the legs shining; the spines on the tibiæ short and stout; the tarsi strongly spinose, the anterior tarsi ciliated outside; wings dark fuscous, with the apical margins and also the hinder margins of the posterior pair subhyaline. Abdomen glossy, the apical segment rugose.

The male only differs in being smaller.

Hab. Australia (Adelaide).

45. SPHEX EPHIPPIUM, n. s. Pl. VI. fig. 3. B.M.

Female. Length 12 lines.—Black: the face densely covered with pale golden pubescence, with a denuded space down the middle of the clypeus; the face thinly sprinkled with long hairs, pale at their base and fuscous at their apex; the mandibles rounded at their apex; a spot of golden pile behind each of the posterior ocelli on the margin of the vertex; the cheeks with a silvery pile and a thin covering of long cinereous pubescence. The prothorax, the tubercles, a spot beneath the wings, and the mesothorax above, covered with fine, short, pale golden pubes-

cence; the scutellum and post-scutellum naked, the latter notched in the middle; the metathorax very densely clothed with long silvery pubescence; wings hyaline, the nervures fusco-ferruginous, the base of the wings and the costal cell fuscous, the apex of the anterior wings with a fuscous cloud. Abdomen smooth, shining and impunctate.

Hab. Australia (Port Essington).

This is possibly the female of *S. opulenta*; but, not coming from the same locality, they are separated.

46. SPHEX OPULENTA. B.M.

Male. Length 10½ lines.—Black: the face densely clothed with bright golden pubescence, that on the cheeks is less dense and paler; the mandibles acute at their apex. The pro- and mesothorax above clothed with golden pubescence, the post-scutellum has a similar clothing; the sides of the thorax and the pectus have a thin pale pubescence; the metathorax very densely clothed with silvery-white pubescence; the legs have a changeable thin silvery pile; wings hyaline, smoky at the base, slightly clouded at their apical margins, and having a fuscous spot beyond the marginal cell. Abdomen subopake, with a thin changeable iridescent pile; the petiole covered with silvery-white pubescence.

Hab. Australia (Richmond River).

47. SPHEX LUCTUOSA. B.M.

Female. Length 13–15 lines.—Black and shining: the face covered with a thin fine silvery pile and a long stiff black pubescence; the cheeks have a silvery pile and a thin long fuscous pubescence; on the vertex the pubescence is long, thin and cinereous. The thorax, except the mesothorax above and the scutellum, thinly covered with short cinereous pubescence; the metathorax opake, finely rugose; the mesothorax and scutellum very delicately punctured; the legs shining black, the tibiæ and tarsi strongly spinose; the wings hyaline, dark fuscous at their base and along the outer margin of the externo-medial cell; the anterior wings are fuscous at their apical margins beyond the enclosed cells. Abdomen very smooth and shining, impunctate, and having a violet iridescence.

The male only differs in being smaller and in having the legs less spinose.

Hab. Australia (Swan River).

This species very closely resembles the *Sphex argentata* of Dahlbom, but in that species the mesothorax is opake, the

puncturing being stronger and very close; the metathorax is proportionably shorter. In the present species the first recurrent nervure unites with the second transverse cubital nervure, which is not the case in *S. argentata*; the colouring of the wings is the same in both species.

48. SPHEX OBSCURELLA.

Female. Length 8 lines.—Black: the face densely clothed with silvery pubescence; the vertex shining, with scattered punctures, and having, as well as the cheeks, a long sparing pale yellowish-white pubescence; the thorax has a similar pubescence to the head, but it is more dense; the coxæ and femora are also pubescent; the wings hyaline, with a fuscous cloud at the apex of the anterior pair; the nervures fusco-ferruginous; the second submarginal cell subquadrate, rather longer than broad, receiving the first recurrent nervure about one-fourth from its apex, the third submarginal cell slightly restricted towards the marginal. Abdomen covered with a fine short silky pile; the petiole pubescent, nearly as long as the first and second segments.

The male closely resembles the female, but is more thickly pubescent, and the abdomen is more densely clothed with silky pile.

Hab. Van Diemen's Land. (Coll. F. Smith.)

This species most closely resembles *S. canescens*, but is at once distinguished by the form of the submarginal cells and by having a longer petiole.

49. SPHEX GLOBOSA. B.M.

Female. Length 7 lines.—Black: the head and thorax opake; the face covered with pale golden pubescence, leaving an angular denuded space on the clypeus, which is shining and has a few scattered punctures; the mandibles ferruginous, their apex black; the cheeks, thorax and legs have a short silky cinereous pile, the two former have also a thinly scattered pale glittering pubescence; the wings hyaline, their nervures rufo-fuscous; the mesothorax has a central abbreviated shallow groove anteriorly, and a slight scratch on each side over the tegulæ; the scutellum prominent, emarginate in the middle; the metathorax finely transversely rugose; the anterior tarsi strongly ciliated outside, the claws ferruginous. The petiole of the abdomen nearly as long as the two basal segments; the abdomen is globose and very smooth and shining, the base and the sides with short silvery-white pubescence; the apical margins of the segments narrowly rufo-piceous.

The male exactly corresponds with the female, but is usually smaller.

Hab. Van Diemen's Land.

This species has the appearance of a *Prionony*x, but the claws are only furnished with two teeth.

50. SPHEX ANTENNATA. B.M.

Male. Length 8 lines.—Black: the face has a silvery pubescence and a mixture of long black hairs; the mandibles ferruginous towards their apex. The thorax has a scattered yellow pubescence; the mesothorax and scutellum evenly punctured, the former with a central abbreviated channel in front and a slight scratch over each tegula; the wings fuscous, the nervures black; the petiole short, the abdomen oblong-ovate.

Hab. New Hebrides (Aneiteum).

The specimen described is not in good condition, being evidently denuded of pubescence; but it may be distinguished by the form of its antennæ, which are very slender at the base and gradually thickened towards the apex.

51. SPHEX RUFIPENNIS. B.M.

Sphex rufipennis, *Fabr. Ent. Syst.* ii. 201. 10.
St. Farg. & Serv. Encycl. Méth. x. 462.
St. Farg. Hym. iii. 334. 1.
Dahlb. Hym. Europ. i. 436. 6.
Pepsis rufipennis, *Fabr. Syst. Piez.* 210. 12.

Hab. India? (*Fabr. l. c.*). Brazil.

Although several extensive collections have been examined, no species from India has been found agreeing with the description of *S. rufipennis*, but most collections contain Brazilian species which do agree with it; it is therefore probable that the habitat given by Fabricius—Tranquebar—is an error, and it is rendered more so from the circumstance of the typical specimen being in the collection of Lund, who collected in Brazil.

52. SPHEX ARGENTATA. B.M.

Sphex argentata, *Dahlb. Hym. Europ.* i. 25. 1.
Sphex albifrons, *St. Farg. Hym.* iii. 337. 6 ♂.
Sphex argentifrons, *St. Farg. Hym.* iii. 337. 7 ♀.

Hab. Greece; India (Bengal; Madras; Punjaub; Sumatra); Java; N. America (St. John's Bluff, East Florida); Africa (Congo; Sierra Leone).

This may possibly be the *Pepsis albifrons* of Fabricius, but the description only points out the dark base of the wings, whereas the apex is dark also. The *Sphex argentifrons* of St. Fargeau is the female, in which sex the metathorax is more distinctly striated than in the male: the species has a wide geographical range.

53. SPHEX VICINA. B.M.

Sphex vicina, *St. Farg. Hym.* iii. 343. 16.

Hab. India.

54. SPHEX FABRICII. B.M.

Sphex Fabricii, *Dahlb. Hym. Europ.* i. 27. 11 & 438. 21.

Hab. India; Tranquebar.

55. SPHEX FERRUGINEA. B.M.

Sphex ferruginea, *St. Farg. Hym.* iii. 345. 18.

Hab. India.

Amongst a number of specimens of this species from the Philippine Islands and others from Ceylon, some have the abdomen entirely black; this variety is probably the *Sphex sericea* of Fabricius.

56. SPHEX FLAVO-VESTITA. B.M.

Male. Length 12 lines.—Black: the head thinly covered with yellow pubescence, the face densely clothed with golden pubescence; the mandibles ferruginous, their base and apex black; the apical joints of the palpi ferruginous, one or two of the basal ones fuscous. Thorax thickly clothed with yellow pubescence; the prothorax above, the sides of the disk of the mesothorax, and the apex of the metathorax, densely covered with golden pubescence; the anterior coxæ and femora beneath are also covered with golden pubescence; the anterior femora, except their base, and all the tibiæ, tarsi and knees pale ferruginous; the apex of the claw-joint and the claws black; the wings yellowish-hyaline, the nervures pale ferruginous, the costal and postcostal nervures fuscous. Abdomen black with a blue tinge, and covered with a fine silky yellow pile.

Hab. India.

57. SPHEX APICALIS. B.M.

Female. Length 13 lines.—Black: the pubescence on the head and thorax black, most dense on the face and cheeks; the

face covered with bright golden pile. The head and thorax finely punctured, most sparing on the disk of the mesothorax; the metathorax most strongly and closely punctured, the punctures confluent; wings fusco-hyaline, smoky towards their base, the apical margins faintly clouded; the nervures rufo-testaceous, the costal, post-costal, the externo-medial and anal nervures dark fuscous; the first and second segments of the abdomen black; the apical margin of the second and the following segments yellow, with a bright golden pile.

Hab. Sumatra.

58. SPHEX LINEOLA. B.M.

Sphex lineola, *St. Farg. Hym.* iii. 353. 27.

Hab. Java; Sumatra; Hong Kong; North China.

59. SPHEX NIGRIPES. B.M.

Female. Length 9–10 lines.—Opake-black: the head and thorax thinly sprinkled with black pubescence; wings fusco-hyaline, dark fuscous towards the base, with a yellowish tinge in the middle and fuscous at their apex; the nervures rufo-testaceous, towards the base of the wings they are darker; the femora and tibiæ ferruginous; the tarsi black.

Hab. Sumatra; North China (Shanghai).

Some specimens from Sumatra have only the posterior femora ferruginous; those from China are similarly coloured; the wings in some examples are darker than in others.

60. SPHEX FORMOSA. B.M.

Female. Length 10 lines.—Black: the face densely clothed with bright golden pubescence, the cheeks have also a golden pubescence, and the head a scattered long golden-yellow pubescence. The thorax is covered with golden pubescence of a rather paler colour than that on the face, the scutellum and a space beneath the wings usually naked, the pubescence densest on the metathorax; the legs covered with a fine silky pile; the wings fusco-hyaline, their apical margins fuscous, the nervures rufo-fuscous. Abdomen: the petiole about the length of the first segment; the abdomen has a blue tinge and is covered with a delicate silky pile.

Hab. Ceram. (Coll. Madame Ida Pfeiffer.)

61. SPHEX MAURA. B.M.

Female. Length 11 lines.—Black: the face covered with short silvery pubescence, and thickly set with long black hairs; the thorax thinly covered with black pubescence, which is most dense on the metathorax; the thorax shining above, finely and sparingly punctured; the post-scutellum notched in the middle; the metathorax very finely transversely striated; the wings dark fuscous, with a violet iridescence; the abdomen smooth, shining and impunctate.

The male exactly corresponds with the female.

Hab. Celebes.

62. SPHEX SERICEA. B.M.

Pepsis sericea, *Fabr. Syst. Piez.* 211. 19.
Sphex sericea, *Dahlb. Hym. Europ.* i. 26. 7. var.?
St. Farg. Hym. iii. 341. 12.

Hab. Islands of the Pacific; Philippine Islands; Java.

This species varies in having the scutellum black or red.

63. SPHEX NIGELLA. B.M.

Female. Length 8 lines.—Black: the head, thorax and petiole with a thin griseous pubescence; the face densely covered with bright silvery pile; the anterior margin of the clypeus has two approximate short teeth in the middle; the mandibles very smooth and shining. Thorax: the disk opake, very delicately punctured, the metathorax finely rugose; the wings subhyaline, slightly clouded at their apical margins, the nervures rufo-testaceous. Abdomen covered with a fine silky pile; the petiole as long as the two basal segments and curved upwards.

Male.—Closely resembles the female, but without teeth on the margin of the clypeus; the mandibles ferruginous and shining as in the other sex.

Hab. Shanghai.

64. SPHEX PERPLEXA. B.M.

Male. Length 10 lines.—Black: the face covered with silvery pubescence; the head and thorax with a sparing black pubescence; the thorax finely rugose, the metathorax transversely so; the wings fusco-hyaline, their apical margins clouded. Abdomen very smooth and shining, the base of the first segment ferrugi-

nous, the apical margins of three or four of the basal segments narrowly rufo-piceous.

Hab. North China (Shanghai). (Coll. R. Fortune, Esq.)

This insect so closely resembles the male of *S. emarginata*, that, with the exception of the pale margins of the segments of the abdomen, there is scarcely another specific difference; both have the second submarginal cell narrow, which receives the first recurrent nervure in the middle.

65. SPHEX MANDARINIA. B.M.

Female. Length 13 lines.—Black: the face covered with fine silvery pile; the anterior margin of the clypeus straight in the middle and sinuated at the sides; the vertex smooth and having a few scattered punctures; a few stiff black hairs scattered over the face. Thorax: the pro- and mesothorax very delicately punctured, interspersed with a few large punctures; a deep depression in the middle of the scutellum; the post-scutellum and metathorax opake, the enclosed space above, finely rugose, the sides beyond obliquely strigose; the claws ferruginous; the tarsi furnished with stout spines, the anterior pair strongly ciliated outside; the tibiæ with a few stout spines; the wings subhyaline, the nervures ferruginous, the apical margins slightly clouded; the second submarginal cell narrow, receiving the first recurrent nervure in the middle. Abdomen red, with the petiole and three apical segments black.

Hab. North China (Shanghai). (Coll. R. Fortune, Esq.)

This species may possibly be the *S. Solieri* of St. Fargeau.

66. SPHEX CYANIVENTRIS.

Pelopœus cyaniventris, *Guér. Voy. Coq. Zool.* pt. 2. p. 263, *Atlas*, t. 8. f. 15.

Sphex? cyaniventris, *Spin. Gay's Chili*, vi. 400. 4.

Hab. Brazil; Chili. (Coll. W. W. Saunders, Esq.)

67. SPHEX AURIFLUUS. B.M.

Sphex aurifluus, *Perty, Del. An. Art.* p. 142. t. 37. f. 19.
Sphex ornata, *St. Farg. Hym.* iii. 344. 17.

Hab. Brazil (Rio Negro); Jamaica; Cuba.

68. SPHEX LANIERII. B.M.

Sphex Lanierii, *Guér. Icon. Règ. Anim. Ins.* iii. 433. t. 70. f. 2.

Hab. Cuba; Brazil.

69. SPHEX MELANOPA.

Sphex melanopa, *Dahlb. Hym. Europ.* i. 27. 13.

Hab. Brazil.

70. SPHEX FULIGINOSA.

Sphex fuliginosa, *Dahlb. Hym. Europ.* i. 25. 5.

Hab. Brazil.

71. SPHEX CHRYSOBAPTA.

Female. Length 8 lines.—Black: the head and thorax covered with bright golden pubescence, exceedingly brilliant in different lights; the wings subhyaline, the nervures ferruginous; the anterior margins of the superior pair have a broad reddish-yellow stain; the legs fusco-ferruginous, the femora bright ferruginous above, and the tibiæ outwardly so; the apical joint of the tarsi dusky; the legs and abdomen covered with a fine reflective silky golden pile; the petiole as long as the two basal segments, ferruginous, as well as the apical margins of all the segments.

Hab. Brazil. (Coll. F. Smith.)

72. SPHEX CLYPEATA. B.M.

Male. Length 10 lines.—Black: the face covered with silvery pubescence and sprinkled with long black hairs; the clypeus very convex, produced anteriorly, its margin truncated; the thorax has a thinly scattered black pubescence; the wings fusco-hyaline; the nervures and extreme base of the wings dark fuscous, the apical margins with a pale fuscous cloud. The abdomen shining and covered with a fine grey silky pile; the apex fringed with curled yellow pubescence; the two apical segments beneath densely covered with similar pubescence.

Hab. Brazil.

73. SPHEX INGENS. B.M.

Female. Length 18–20 lines.—Black: the head opake, thinly clothed with black pubescence; the clypeus has a few scattered punctures, margined in front, the margination obscurely ferruginous; the mandibles rugose towards their base; the palpi fuscous, with the tips of the joints pale ferruginous. Thorax clothed above with black pubescence, densely so on the metathorax; on the disk of the mesothorax is a short velvety pubescence; the anterior femora have an obscure ferruginous stripe beneath at their apex; wings rufo-fuscous, subhyaline, darkest at their

base, the apical margins of the anterior pair slightly clouded, the nervures fusco-ferruginous. Abdomen elongate-ovate, subopake; the petiole short, about the length of the first segment, and having an obscure green or blue tinge.

Male. Length $1\frac{3}{4}$–2 inches.—Closely resembling the female, but having a silvery pubescence on the face and sides of the clypeus; the mandibles ferruginous in the middle; the thorax densely pubescent, more so than in the other sex; the posterior coxæ very pubescent; the anterior and intermediate femora more or less ferruginous beneath; the intermediate segments of the abdomen have their basal margins frequently more or less ferruginous. In this species the first recurrent nervure nearly unites with the second transverso-medial nervure, and the third submarginal cell is very much restricted towards the marginal cell.

Hab. Brazil.

74. SPHEX PROXIMA. B.M.

Female. Length 11 lines.—Black: the face thinly covered with golden pubescence, most dense on the sides; the face and cheeks have a thin long pale yellow pubescence; the mandibles sculptured externally with longitudinal striæ. Thorax: the pro- and mesothorax above are covered with a very short black velvety pubescence, the metathorax thinly covered with cinereous pubescence; the wings dark fuscous with a violet iridescence. Abdomen ferruginous, with the petiole and base of the fifth segment black; the sixth segment and the apical margin of the fifth rugose.

Hab. Brazil.

This species most closely resembles the *Pepsis Crucis* of Fabricius, but the colour of its pubescence and wings, and also its striated mandibles, easily distinguish it.

75. SPHEX COSTIPENNIS.

Sphex costipennis, *Spin. Mem. Accad. Torino*, xiii. 54. 35 (1853).

Hab. Brazil (Para).

76. SPHEX DIFFICILIS. B.M.

Sphex difficilis, *Spin. Mem. Accad. Torino*, xiii. 54. 36 (1853).

Hab. Brazil (Para).

77. SPHEX NITIDIVENTRIS. B.M.

Sphex nitidiventris, *Spin. Mem. Accad. Torino*, xiii. 53. 34 (1853).

Hab. Brazil (Para).

78. SPHEX PETIOLATA. B.M.

Male. Length 7 lines.—Black: the face covered with golden pubescence, also a little at the outer orbit of the eyes; the tips of the mandibles ferruginous. Thorax thinly covered with short golden pubescence; wings subhyaline, the nervures ferruginous; the anterior pair have a fuscous cloud extending along their front margin from base to apex; this cloud varies in depth of colouring in different examples; the tegulæ rufo-testaceous; the legs ferruginous; the femora with a black stripe behind, the tibiæ with one within, the tarsi fuscous or black with the tips of the joints ferruginous, the claws ferruginous at the base. Abdomen: the petiole as long as the two basal segments, sometimes slightly ferruginous at the base above; the first segment ferruginous, with a dark macula above in the middle, sometimes with several smaller spots; the apical margins of the segments rufo-piceous.

Hab. Brazil (Para). (Coll. H. W. Bates.)

This is very probably the male of the *S. costipennis* of Spinola.

79. SPHEX CYANIPENNIS.

Sphex? cyanipennis, *Fabr. Ent. Syst.* ii. 200. 6.
Pepsis cyanipennis, *Fabr. Syst. Piez.* 209. 7.

Hab. Cayenne; Brazil. (Coll. F. Smith.)

80. SPHEX CRUCIS. B.M.

Pepsis Crucis, *Fabr. Syst. Piez.* 209. 4.
Sphex Crucis, *St. Farg. Hym.* iii. 342. 14.

Hab. South America (Cayenne).

81. SPHEX DORSALIS. B.M.

Sphex dorsalis, *St. Farg. Hym.* iii. 347. 20 ♂.

Hab. Cayenne; Brazil (Ega and Santarem).

The female closely resembles the male, having the thorax and head richly decorated with golden pubescence; the legs and abdomen red, with the coxæ, petiole, the posterior margin of the third segment of the abdomen, the fourth and fifth, black; tip of the abdomen red.

82. SPHEX CHILIENSIS.

Sphex Chiliensis, *St. Farg. Hym.* iii. 341. 13.

Hab. Chili.

83. SPHEX LATREILLII. B.M.

Sphex Latreillii, *St. Farg. Mag. Zool.* t. 33 ♂ (1831); *Hym.* iii. 361. 38.

Dahlb. Hym. Europ. i. 27. 14 & 438. 24.

Spin. Gay's Chili, vi. 397. 1.

Sphex Thunbergii, *St. Farg. Mag. Zool.* t. 34 ♀ (1831); *Hym.* iii. 362. 39.

Hab. Chili; Valparaiso.

84. SPHEX MELÆNA.

Sphex melæna, *Spin. Gay's Chili*, vi. 398. 2.

Hab. Chili.

85. SPHEX SPINOLÆ.

Sphex Chiliensis, *Spin. Gay's Chili*, vi. 399. 3 (nec *St. Farg.*).

Hab. Chili. (Coll. F. Smith.)

86. SPHEX OPACA.

Sphex opaca, *Dahlb. Hym. Europ.* i. 437. 14.

Hab. South America.

87. SPHEX JOHANNIS.

Pepsis Johannis, *Fabr. Syst. Piez.* 208. 3.

Hab. South America.

This is probably the *Priononyx striata* of this Catalogue. See the remarks following that species, p. 266.

88. SPHEX RUFIPES. B.M.

Sphex rufipes, *St. Farg. Hym.* iii. 343. 15.

Hab. St. Domingo (Port-au-Prince).

89. SPHEX T.

Pepsis T, *Pal. de Beauv. Ins.* p. 117. t. 3. f. 5.

Hab. St. Domingo.

90. SPHEX JAMAICENSIS.

Vespa Jamaicensis, *Drury, Ill. Exot. Ins.* i. 104. t. 44. f. 4.

Hab. Jamaica.

91. SPHEX CALIGINOSA.

Sphex caliginosa, *Erichs. Faun. und Fl. Brit. Guiana,* iii. 589.

Hab. British Guiana.

92. SPHEX LATRO.

Sphex latro, *Erichs. Faun. und Fl. Brit. Guiana,* iii. 588.

Hab. British Guiana.

93. SPHEX SINGULARIS. B.M.

Male. Length 9 lines.—Black: the face densely covered with golden pubescence, the vertex and cheeks with a long thin pale yellow pubescence. Thorax clothed with long thin pale golden pubescence; the prothorax above, the post-scutellum, and an epaulet over the tegulæ of short bright golden pile; the legs with a fine changeable silky pile, most dense on the coxæ and posterior tibiæ within; the wings hyaline, with a pale fuscous cloud at their apical margins and a darker one beyond the marginal cell; the third submarginal cell subpetiolate. The abdomen has an obscure chalybeous tinge, with a little silky pile at the base.

Hab. Honduras.

94. SPHEX PENNSYLVANICA. B.M.

Sphex Pensylvanica, *Linn. Syst. Nat.* i. 941. 3.
De Geer, Ins. iii. 586. 2. t. 30. f. 2.
Fabr. Syst. Ent. 346. 3; *Ent. Syst.* ii. 201. 11.
Pal. de Beauv. Ins. Afric. et Amér. p. 116. t. 3. f. 4.
Dahlb. Hym. Europ. i. 25. 4.
St. Farg. Hym. iii. 335. 3.
Pepsis Pensylvanica, *Fabr. Syst. Piez.* 211. 15.
Sphex Servillei, *St. Farg. Hym.* iii. 336. 5 ♂.

Hab. North America; Pennsylvania.

95. SPHEX ICHNEUMONEA. B.M.

Sphex ichneumonea, *Linn. Syst. Nat.* i. 959. 36.
De Geer, Ins. ii. 759. t. 32. f. 13. 17.
Fabr. Ent. Syst. ii. 207. 34.
Dahlb. Hym. Europ. i. 26. 10.
St. Farg. Hym. iii. 346. 19.
Erichs. Faun. und Fl. Brit. Guiana, iii. 589.
Chlorion ichneumoneum, *Fabr. Syst. Piez.* 219. 6.

Hab. North America; St. John's Bluff, East Florida; South Carolina.

96. SPHEX PHILADELPHICA.

Sphex Philadelphica, *St. Farg. Hym. Europ.* i. 340. 11.

Hab. Philadelphia.

97. SPHEX TIBIALIS.

Sphex tibialis, *St. Farg. Hym. Europ.* i. 339. 10.

Hab. Philadelphia. (Coll. W. W. Saunders, Esq.)

98. SPHEX VIOLACEIPENNIS.

Sphex violaceipennis, *St. Farg. Hym.* iii. 349. 22.

Hab. Philadelphia.

99. SPHEX CRŒSUS.

Sphex crœsus, *St. Farg. Hym.* iii. 351. 25.

Hab. North America; Mexico. (Coll. F. Smith.)

100. SPHEX DIMIDIATA.

Sphex dimidiata, *St. Farg. Hym.* iii. 352. 26.

Hab. North America.

101. SPHEX ELEGANS. B.M.

Male. Length 7 lines.—Black: the face covered with a short rich golden pubescence, and sprinkled with long hairs of the same colour; the mandibles ferruginous at their apex. Thorax thinly covered with erect golden hairs; the mesothorax and scutellum evenly punctured; the metathorax opake; wings yellow-hyaline, with a pale fuscous cloud at their apical margins, and a darker one beyond the marginal cell; the nervures pale ferruginous; the knees, tibiæ and tarsi pale ferruginous; the tips of the claws black. Abdomen smooth and shining, with the apical margins of the segments obscurely rufo-testaceous; sometimes the two basal segments are ferruginous, with the base of the first, and base and apex of the second, black.

Hab. California.

102. SPHEX APICALIS. B.M.

Sphex apicalis, *Harris, Cat. Ins. Massach.*

Male. Length 6–8 lines.—Black: the face covered with short silvery pubescence, and sprinkled with a mixture of long fuscous and pale hairs; the mandibles slightly ferruginous at their inner margin towards their apex; the vertex is shining, sparingly and

finely punctured, and thinly covered, as well as the cheeks, with long cinereous pubescence. Thorax: the mesothorax and scutellum shining and evenly punctured; the metathorax opake and rather finely rugose; the thorax, coxæ and femora, as well as the petiole of the abdomen, thinly covered with erect cinereous pubescence; wings fusco-hyaline, the apical margins, as well as the anterior margin of the superior pair, with a darker fuscous cloud; the petiole as long as the two basal segments of the abdomen; the latter has a slight chalybeous tinge, and in some examples the apical margins of the segments are more or less pale testaceous.

Hab. East Florida (St. John's Bluff); Georgia.

103. SPHEX FLAVIPES.

Female. Length 13 lines.—Black: the face densely clothed with golden pubescence; the basal half of the mandibles ferruginous; the labrum has a central longitudinal carina, its apical margin is rounded. Thorax opake; the posterior margin of the prothorax, the hinder margin of the tubercles, an epaulet over the tegulæ, the post-scutellum and apex of the metathorax, covered with short bright golden pubescence; the metathorax is thinly clothed with yellow pubescence; the wings dark fuscous; the tibiæ, tarsi and knees of a reddish-yellow, the spines of the same colour. Abdomen opake, covered with a fine reflective silky pile.

Hab. Georgia. (Coll. F. Smith.)

This species resembles the *Sphex tibialis* of St. Fargeau, but that insect has fuscous pubescence on the head and thorax, and the spines on the legs are black.

104. SPHEX INSTABILIS.

Female. Length 9 lines.—Black: the face covered with pale golden pubescence, and sprinkled, as well as the cheeks, with longer pale pubescence; the mandibles ferruginous at the base. The pro- and mesothorax above are covered with a fine golden pile; the metathorax clothed with pale golden pubescence, the apex densely so; wings yellow-hyaline, the apical margins of the superior pair have a broad dark fuscous border, the apex of the inferior pair faintly clouded, the nervures pale testaceous; the intermediate and posterior tibiæ and tarsi fusco-ferruginous; in some examples they are bright ferruginous, as well as the posterior femora. The abdomen covered with a fine silky pile; in some examples the petiole is ferruginous.

Hab. North America.

Genus 11. HARPACTOPUS.

F. Smith, MSS.

This genus is formed for the reception of those species which differ from the typical *Sphex* in the following particulars.

The second submarginal cell is narrowed towards the marginal and receives the first recurrent nervure towards the base; the second recurrent nervure is received by the third submarginal cell, a little within; the legs elongate, the tarsi densely spinose; the claws bidentate, the anterior pair with dense long cilia outside; the abdomen ovate, abruptly convex at the base, pointed at the apex.

1. HARPACTOPUS CRUDELIS, n. s. Pl. VI. fig. 4. B.M.

Female. Length 12 lines.—Black: the face covered with silvery pubescence, and sprinkled with stiff bristly hairs; the cheeks and margin of the vertex have a black pubescence; the clypeus with a notch in the middle of the anterior margin, and having a longitudinal impressed line not quite extending to its base. The prothorax covered above with silvery pubescence; the mesothorax and scutellum roughly punctured, the latter is rugose-striate behind; the metathorax thickly clothed with black pubescence, and coarsely rugose; a raised acute tubercle in the middle of the post-scutellum, behind abruptly truncated; the legs elongate, stout and thickly spinose, particularly the tarsi; the anterior pair strongly ciliated outside; the claw-joint large, and set with strong bristles; wings yellow-hyaline, their outer margins hyaline, the apex of the anterior pair fuscous. Abdomen ovate, the apex acute, very convex, abruptly so at the base, and very smooth and shining.

Hab. Madras.

2. HARPACTOPUS TYRANNUS. B.M.

Female. Length 12 lines.—Black: the face has an indistinct silvery pubescence, that on the cheeks is black; the face thickly covered with stiff black hairs; the vertex rather finely punctured. Thorax rugose-punctate; the scutellum longitudinally strigose behind, sparingly punctured in front and slightly depressed in the middle; the post-scutellum with an elevated compressed tubercle in the middle; the metathorax abruptly truncated, and covered with long sooty-black pubescence; the legs as in *H. crudelis*; wings dark fuscous, their apical margins broadly subhyaline. Abdomen smooth and shining, the base subtruncate or abruptly elevated, very convex, acute at the apex.

Hab. Port Natal.

3. HARPACTOPUS SÆVUS. B.M.

Female. Length 8–11 lines.—Black: the face densely covered with bright silvery pubescence; the clypeus sprinkled with stiff black bristly hairs; the vertex and cheeks have a thin cinereous pubescence. The pro- and mesothorax covered with pale golden pubescence; the metathorax transversely rugose; the wings hyaline, with more or less of a yellow tinge, their apical margins slightly clouded; the nervures pale rufo-testaceous; the tarsi thickly spined, the anterior pair strongly ciliated outside. Abdomen subglobose, very convex, with the petiole a little longer than the first segment.

The male only differs in being smaller and more pubescent.

Hab. Australia (Swan River; Cape Upstart).

4. HARPACTOPUS NIVOSUS. B.M.

Female. Length 10–13 lines.—Ferruginous: the head, tips of the mandibles and flagellum black; the head, thorax, coxæ and base of the femora densely clothed with snow-white short silky pubescence; the other parts of the legs have a thin white pile; the spines at the apex of the tibiæ black, those on the tibiæ and tarsi are a mixture of black and red ones; the wings hyaline, the nervures fusco-ferruginous, the tegulæ ferruginous; the post-scutellum with a slightly raised tubercle in the middle. Abdomen: the petiole and first segment covered with snow-white pubescence; the apical margins of the segments pale rufo-testaceous.

Hab. Northern India.

Genus 12. PRIONONYX.

Sphex, pt., *Fabr. Ent. Syst.* ii. 198 (1793).
Pepsis, pt., *Fabr. Syst. Piez.* 207 (1804).
Prionony x, *Dahlb. Hym. Europ.* i. 28 (1843).

This genus differs from the genus *Sphex* in having the claws quadridentate beneath at their base; the neuration of the wings and the form of the abdomen are the same as in *Harpactopus*.

1. PRIONONYX THOMÆ. B.M.

Sphex Thomæ, *Fabr. Ent. Syst.* ii. 199. 4.
Pepsis Thomæ, *Fabr. Syst. Piez.* 209. 5.
Prionony x Thomæ, *Dahlb. Hym. Europ.* i. 28. 1.

Hab. South America; Island of St. Thomas; Jamaica; Brazil (Santarem); South Carolina; East Florida.

Many of the examples of this species have the wings hyaline or subhyaline; this is the case in all from Brazil and in others from California; examples from Jamaica have them fuscous; beyond the difference in the colouring of the wings no specific distinction has been detected.

2. PRIONONYX ATRATA. B.M.

Sphex atrata, *St. Farg. Hym.* iii. 355. 30.

Hab. North America.

St. Fargeau described this species from a specimen in Serville's Collection, its locality being unknown: it is the *Sphex labrosa* of Harris's Catalogue.

3. PRIONONYX DOUMERCI.

Sphex Doumerci, *St. Farg. Hym.* iii. 357. 33.

Hab. Cayenne; Brazil.

4. PRIONONYX STRIATA. B.M.

Female. Length 10–11 lines.—Black: the face covered with silvery pile, and having, as well as the cheeks, a number of long white hairs; the anterior margin of the clypeus with a small notch in the middle. The mesothorax longitudinally finely strigose, the metathorax transversely so, and covered thinly with short cinereous pubescence; the scutellum bituberculate; the tibiæ and tarsi strongly spinose; the anterior tarsi with long cilia outside; the wings black, with a violet iridescence, their apical margins palest. Abdomen ferruginous, with the petiole black.

The male only differs in being smaller.

Hab. Brazil (Para; Villa Nova). (Coll. H. W. Bates.)

This is probably the *Pepsis Johannis* of Fabricius, and also the *Sphex Doumerci* of St. Fargeau; the former, however, does not notice the striation of the thorax, but points out the emargination of the scutellum, which is described here as bituberculate: St. Fargeau does not notice the form of the scutellum, but describes the *metathorax* as being transversely striated; the *mesothorax* he does not mention. Under these circumstances we have given another name and description to the species.

5. PRIONONYX ÆGYPTIA.

Sphex Ægyptia, *St. Farg. Hym.* iii. 356. 32.

Hab. Egypt.

Genus 13. PARASPHEX.

Enodia, *Dahlb. Hym. Europ.* i. 28 (1843), nec *Hübn. Lepidop.* (1816).

This genus is distinguished from *Sphex* proper by having the claws of the tarsi tridenticulate; the body is of a more slender and graceful form; the abdomen is more elongate and narrow, and very acute or lanceolate at the apex. It forms a distinct subgeneric division of the typical *Sphex*.

1. PARASPHEX FERVENS. B.M.

Sphex fervens, *Fabr. Ent. Syst.* ii. 200. 5 (nec *Linn.*).
Pepsis fervens, *Fabr. Syst. Piez.* 209. 6.
Pepsis pubescens, *Fabr. Syst. Piez.* 212. 22.
Enodia canescens, *Dahlb. Hym. Europ.* i. 28. 2.
Enodia fervens, *Dahlb. Hym. Europ.* i. 439. 2.
Priononyx fervens, *Erichs. Faun. und Fl. Brit. Guiana*, iii. 589.

Hab. India (Madras; N. Bengal); Africa (Sierra Leone; Gambia; Cape of Good Hope).

The typical specimen of *P. fervens* is in the Banksian Cabinet; it is from India. The African specimens appear to be the *Pepsis pubescens* of Fabricius.

2. PARASPHEX ALBISECTA. B.M.

Sphex albisecta, *St. Fargeau & Serv. Encycl. Méth.* x. 462. 2.
Ammophila Kirbii, *Van d. Lind, Obs.* i. 90. 7.
Sphex trichargyra, *Spin. Ann. Soc. Ent. Fr.* vii. 466. 11 (1838).
Enodia albisecta, *Dahlb. Hym. Europ.* i. 28. 1 & 438. 1.

Hab. South of France; Piedmont; Montpellier; Albania; Africa (Oran; Port Natal; Cape).

3. PARASPHEX MARGINATA. B.M.

Female. Length 6½–8 lines.—Black: the scape and two basal joints of the flagellum more or less, as well as the mandibles, ferruginous, the latter black at their tips; the face and cheeks clothed with silvery pubescence; the thorax and coxæ thinly covered with short silvery-white pubescence; the meso- and metathorax nearly naked, the former with strong scattered punctures, the latter more finely punctured and indistinctly transversely striated; the tegulæ and legs red, with the coxæ and femora above more or less black; wings fusco-hyaline, the nervures ferruginous. Abdomen: the petiole and two basal segments red, the apical margin of the second sometimes black, or

rarely the petiole and base of the first segment only, red; the apical margins of all the segments white; the petiole nearly as long as the abdomen.

The male is rather smaller, and has the antennæ entirely black; the mandibles slightly ferruginous; the tegulæ more or less ferruginous: this sex is also usually more pubescent; the petiole and first segment red; but frequently the petiole is more or less fuscous, sometimes black.

This species very closely resembles *Enodia albisecta*; its principal differences consist in having a longer petiole and the metathorax substriated; the petiole, legs and mandibles are also more or less red.

Hab. Gambia.

Genus 14. DOLICHURUS.

Pompilus, pt., *Spin. Ins. Lig.* fasc. 2. 52 (1808).
Pison, *Latr. Gen. Crust. et Ins.* iv. 58 (1809).
Dolichurus, *Latr. Gen. Crust. et Ins.* iv. 387 (1809).

1. DOLICHURUS CORNICULUS. B.M.

Pompilus corniculus, *Spin. Ins. Lig.* fasc. 2. 52.
Pison ater, *Latr. Gen. Crust. et Ins.* iv. 58.
Dolichurus ater, *Latr. idem*, 387.
Van d. Lind, Obs. i. 95.
Dolichurus corniculus, *St. Farg. Encycl. Méth.* x. 450.
Shuck. Foss. Hym. 85. 1.
Dahlb. Hym. Europ. i. 29. 13.
St. Farg. Hym. iii. 327. 1.
Wesm. Hym. Foss. Belg. 70. 1.

Hab. Europe.

Genus 15. AMPULEX.

Sphex, pt., *Fabr. Ent. Syst.* ii. 198 (1793).
Chlorion, pt., *Fabr. Syst. Piez.* 217 (1804).
Ampulex, *Jurine, Hym.* p. 134 (1807).

1. AMPULEX COMPRESSA. B.M.

Sphex compressa, *Fabr. Ent. Syst.* ii. 206. 32; *Mant.* i. 275. 25.
Chlorion compressum, *Fabr. Syst. Piez.* 219. 7.
Latr. Hist. Nat. Crust. et Ins. xiii. 294.
Westw. Trans. Ent. Soc. Lond. iii. 227 (1843).

Ampulex compressa, *Jurine, Hym.* p. 134 (1807).
St. Farg. Encycl. Méth. x. 450; *Hym.* iii. 325. 1.
Dahlb. Hym. Europ. i. 29. 1.
Guêpe Ichneumon, *Reaum. Ins.* vi. 280. t. 28. f. 2, 3.

Hab. India; China; Isle of France; Java.

The neuration of the wings is very inconstant in this species, particularly in small examples of the male; the typical number of submarginal cells is three, but the first transverse cubital nervure is frequently obsolete, or partly so, thus making the number two.

2. AMPULEX SIBIRICA. B.M.

Sphex sibirica, *Fabr. Ent. Syst.* ii. 207. 33, & *Cat. Mus. Linn. Soc.*
Chlorion sibiricum, *Fabr. Syst. Piez.* 218. 4.
Ampulex compressiventris, *Guér. Icon. Règ. Anim.* iii. t. 70. f. 4.
Ampulex Guerini, *Dahlb. Hym. Europ.* i. 29. 2.

Hab. Siberia? (*Fabr.*); Malabar; Senegal; Sierra Leone; The Gambia.

3. AMPULEX CUPREA. B.M.

Male. Length 4¼ lines.—Brassy-green, varying in tint in different lights; the carina on the face entire, arched, and produced at the apex; the head deeply rugose-punctate. The prothorax is transversely rugose-striate above, the sides being roughly punctured; the mesothorax covered with large deep punctures; the metathorax has a central carina which terminates before the apex; on each side is an abbreviated oblique one and a second entire oblique carina which unite at the apical margin of the truncation by a short transverse one; the lateral margins are raised, and the apical angles terminate in a stout bent tooth; the wings hyaline and iridescent, the nervures fusco-ferruginous. Abdomen shining, and having a few scattered delicate punctures.

Hab. China (Hong Kong).

In the Museum are two examples of this species; in both the first recurrent nervure is obsolete.

4. AMPULEX CYANIPES.

Chlorion cyanipes, *Westw. Trans. Ent. Soc. Lond.* iii. 230 ♂; *Arc. Ent.* ii. 65. t. 65.

Hab. Cape of Good Hope.

5. AMPULEX PURPUREA. B.M.

Chlorion purpureum, *Westw. Arc. Ent.* ii. 65 ♀.

Hab. Africa (Cape of Good Hope; Port Natal).

This species is subject to the same variation in the neuration of the wings as the typical species, *A. compressa*.

6. AMPULEX NEBULOSA. B.M.

Female. Length 4½ lines.—Green: the head, pro- and mesothorax covered with large deep confluent punctures; the clypeus with an elevated carina in the centre, its apex as well as the mandibles ferruginous; the antennæ black; the head with scattered erect long white hairs. The metathorax with one central and three lateral longitudinal oblique carinæ, between which it is transversely striated; the lateral apical margins of the verge of the truncation armed with a stout acute tooth; the truncation transversely rugose; the post-scutellum covered with silvery pubescence; thorax and legs with scattered erect pale pubescence; the posterior coxæ covered with silvery-white pubescence; the calcaria pale testaceous; the wings hyaline, a dark cloud crossing the anterior wings from the base of the marginal cell, occupying the apex of the first submarginal, the whole of the second, and the upper portion of the third discoidal cell. Abdomen strongly, but not very closely, punctured, the apex of the second segment and the whole of the following segments covered with silvery hairs.

Hab. Port Natal.

7. AMPULEX CHALYBEA, n. s. Pl. VII. fig. 3. B.M.

Female. Length 9 lines.—Dark blue, variegated with bright purple tints; the mandibles, anterior tibiæ in front, and the knees, ferruginous; the antennæ and tarsi dark fuscous; the wings fuscous; the head coarsely punctured; the prothorax and sides of the mesothorax with large scattered punctures; the metathorax with a central longitudinal carina and three oblique ones on each side, the spaces between transversely striated; the apical angles produced into a stout sharp angular tooth; the abdomen impunctate.

Hab. Africa (Fantee).

This may possibly be the *A. fumipennis* of Dahlbom; but, as he does not mention the red mandibles and front of the anterior legs, it has not been considered advisable to adopt his name.

8. AMPULEX ANGUSTICOLLIS. B.M.

Ampulex angusticollis, *Spin. Ann. Soc. Ent. Fr.* x. 108. 64 ♀.
Chlorion angusticolle, *Westw. Arc. Ent.* ii. 66. 4.

Hab. Cayenne; Brazil (Para).

9. AMPULEX ÆNEA.

Ampulex ænea, *Spin. Ann. Soc. Ent. Fr.* x. 110 ♀.
Chlorion æneum, *Westw. Arc. Ent.* ii. 110.

Hab. Cayenne.

10. AMPULEX THORACICA. B.M.

Male. Length 5¼ lines.—Blue-green: the head coarsely punctured, elongated and much narrowed behind the eyes; the carina on the face produced at the apex into an acute spine; the lateral angles of the face produced and acute. The pro- and mesothorax with large deep punctures; the prothorax elevated posteriorly, and transversely striated in front; the metathorax with a central and four lateral carinæ, the interstices transversely striated, the posterior angles terminating in long stout bent spines; the wings subhyaline, with two indistinct fuscous fasciæ, one crossing the second submarginal cell, the other traversing the apex of the externo-medial cell. Abdomen smooth, shining and impunctate.

Hab. Brazil (Villa Nova).

This is probably the male of *Ampulex angusticollis*.

11. AMPULEX RAPTOR. B.M.

Male. Length 5 lines.—Bright green: head thickly and coarsely punctured; the clypeus carinated in the centre and produced into an acute spine at the apex. The pro- and mesothorax covered with large deep coarse punctures; the metathorax with a central carina and four lateral ones, between which it is transversely striated; the lateral apical margins of the superior surface produced into a stout long curved spine; the truncation rugose; wings hyaline, with a faint cloud crossing the second submarginal cell, and occupying also the base of the marginal cell; the legs with tints of blue on the tibiæ and tarsi, the coxæ and thorax beneath with large, not very close, deep punctures. Abdomen ovate, with a blue tinge on the disk; the first, third and following segments coarsely punctured; the second segment with finer scattered punctures.

Hab. Venezuela.

This species is most nearly allied to *A. thoracica*, but differs in wanting the prominent angles at the anterior margin of the face; the prothorax is of a different form and is differently sculptured, and the abdomen is coarsely punctured; in *A. thoracica* it is smooth and shining.

12. AMPULEX HOSPES. B.M.

Female. Length 12 lines.—Brilliant purple, with shades of green in certain lights; the head with scattered punctures, which are closest and strongest towards the insertion of the antennæ; the clypeus with a highly elevated carina down the centre; an abbreviated impressed line above the stemmata. Thorax: the prothorax smooth and convex above, with a few delicate scattered punctures; the mesothorax, scutellum and post-scutellum smooth and shining, with a few widely dispersed punctures; the disk of the mesothorax with two deeply impressed longitudinal lines, extending from the anterior margin to the base of the scutellum; outside of each, close to the tegulæ, is a deeply impressed fovea; the wings fuscous; the femora red; the metathorax rounded at the posterior angles, not spined, the upper surface with two oblique broad longitudinal grooves, which are transversely striated; the sides and posterior margin of the upper surface smooth and shining; the truncation smooth and shining; the sides have a transversely striated groove at their upper margin, below which they are punctured. Abdomen very smooth and shining, much compressed at the sides; beneath suddenly produced at the base of the second segment.

Hab. Borneo (Sarawak). (Coll. A. R. Wallace, Esq.)

This species in some particulars differs from those of the rest of the genus: the antennæ are stouter and shorter, as are also the mandibles; the wings, in the three females received, have only two submarginal cells, but the obliteration of the first transverse cubital nervure is of frequent occurrence in the genus; the metathorax is without spines at the posterior lateral angles, and the abdomen is abruptly produced at the base of the second segment beneath:—these differences constitute a remarkable and very distinct species; they cannot be regarded as of higher value, as a good series of the different species of the genus exhibit many approaches to the remarkable peculiarities of the present species.

Genus 16. RHINOPSIS.

Rhinopsis, *Westw. Arc. Ent.* ii. 68.

1. RHINOPSIS ABBOTTII. Pl. VII. fig. 3. B.M.

Rhinopsis Abbottii, *Westw. Arc. Ent.* ii. 68. t. 65. f. 5 ♀.

Hab. Georgia.

Genus 17. APHELOTOMA.

Aphelotoma, *Westw. Trans. Ent. Soc. Lond.* iii. 225 (1841).

1. APHELOTOMA TASMANICA. Pl. VII. fig. 4 ♂.

Aphelotoma tasmanica, *Westw. Trans. Ent. Soc. Lond.* iii. 226. t. xii. f. 4 ♀; *Arc. Ent.* ii. 65. t. 65. f. 3 ♂.

Hab. Van Diemen's Land. (Coll. W. W. Saunders and J. O. Westwood, Esq.)

Genus 18. TRIROGMA.

Trirogma, *Westw. Trans. Ent. Soc. Lond.* iii. 223 (1841).

1. TRIROGMA CÆRULEA. B.M.

Trirogma cærulea, *Westw. Trans. Ent. Soc. Lond.* iii. 225. t. 12. f. 3 ♂; *Arc. Ent.* ii. 66. t. 65. f. 4 ♀.

Hab. Northern India; Madras.

Fam. 4. LARRIDÆ.

Mandibles notched exteriorly near the base; the labrum concealed, with a single spine at the apex of the intermediate tibiæ; the abdomen ovoid-conical.

Larrida, *Leach. Edin. Encycl.* (1817).
Larradæ, *Leach, Sam. Comp.* (1819).
Larridæ, *Steph. Syst. Cat.* (1829).
Larrites, *Newm. Ent. Mag.* i. (1834).
Lyrops, pt., *Guér. Icon. Règ. Anim.* iii. (1834).

Genus 1. LARRADA.

Sphex, pt., *Rossi, Faun. Etrus.* ii.
Fabr. Ent. Syst. ii. 213 (1793).
Larra, pt., *Fabr. Ent. Syst.* ii. 221.
Pompilus, pt., *Fabr. Syst. Piez.* 194 (1804).
Liris, pt., *Illig. Ed. Faun. Etrus.* (1807).
Astata, pt., *Spin. Ins. Lig.* i. 18 (1808).

The genus *Larra* was established by Fabricius in his "Ento-

mologia Systematica," and contained three or four species agreeing with its type, *Larra vespiformis*, the *Stizus vespiformis* of Latreille, Dahlbom and St. Fargeau. In this Catalogue the name *Larra* is restored to those species for which Fabricius originally formed it. The genus *Larra* of Latreille contains two, or perhaps more, good generic types of form: for one, the generic appellation *Tachytes*, as proposed by Panzer, is adopted: for the second the name *Larrada* is proposed; it contains those species which have the marginal cell *truncated at the apex* and *appendiculated*, and three submarginal cells, the first as long as the two following, the second receiving both recurrent nervures near its centre, the third lunate; the metathorax *truncated posteriorly, elongate*, the sides being generally parallel, but sometimes a little wider at the base; the mandibles large, arcuate, with a dentation on their exterior towards the base; abdomen ovato-conical, acuminate at the apex. In the type, *L. anathema*, the mandibles are not toothed within, and such is the case with the majority of the species; but in many there is a stout tooth, which is notched at its base. Probably a thorough investigation of the mandibles of all the species would show the necessity for making a separate genus for the species with teeth within the mandibles; in the present work they are included with the rest.

Species of Europe.

Div. 1. *Abdomen red and black.*

1. LARRADA ANATHEMA. B.M.

Sphex anathema, *Rossi, Faun. Etrus.* ii. 65. 822 ♀.
Larra ichneumoniformis, *Fabr. Ent. Syst.* ii. 221. 4 ♂; *Syst. Piez.* 220. 4.
Coqueb. Illustr. Icon. Ins. ii. t. 12. f. 10 ♀.
Panz. Faun. Germ. 76. 18 ♂; *Krit. Revis.* ii. 128.
Spin. Ins. Lig. i. 72. 1.
Latr. Nouv. Dict. 2nd ed. xvii. 324; *Gen. Crust. et Ins.* iv. 71.
Dumer. Dict. Sc. Nat. xxv. 285.
Guér. Dict. Class. ix. 224.
Loris anathema, *Illig. Ed. Faun. Etrus.* ii. 101. 822.
Pompilus teutonus, *Fabr. Syst. Piez.* 194. 34 ♀.
Larra anathema, *Van d. Lind, Obs.* ii. 18. 1.
Shuck. Foss. Hym. 87. 1
Dahlb. Hym. Europ. i. 136. 68 & 472. 1.
Smith, Cat. Brit. Hym. 18. 1.
Tachytes anathema, *St. Farg. Hym.* iii. 254. 17.
Lucas, Explo. Sc. Algér. iii. 250.

Hab. Italy; France; Germany; Hungary; Greece; Algeria; Port Natal. (Britain?)

Div. 2. *Abdomen black.*

2. LARRADA NIGRA.

Tachytes nigra, *Van. d. Lind, Obs.* ii. 23. 6.
St. Farg. Hym. iii. 242. 3.
Lucas, Explo. Sc. Algér. iii. 248.

Hab. Italy; Algeria (Oran).

3. LARRADA NITIDA.

Astata nitida, *Spin. Ins. Lig.* i. 18.
Tachytes nitida, *Van. d. Lind, Obs.* ii. 24. 7.
Tachytes pompiliformis, *Dahlb. Hym. Europ.* i. 130. 66.

Hab. Italy; Germany; Sweden. (Coll. W. W. Saunders, Esq.)

4. LARRADA ATRATA. B.M.

Tachytes atrata, *St. Farg. Hym.* iii. 245. 6.
Lucas, Explo. Sc. Algér. iii. 248.

Hab. Piedmont; Algeria.

Species of Asia.

Div. 1. *Abdomen red, or red and black.*

5. LARRADA SIMILLIMA.

Female. Length 7–9 lines.—Head, thorax and legs black; the two former closely punctured and thinly covered with short cinereous pubescence; the metathorax elongate, abruptly truncate at the apex, the truncation punctate and having a longitudinal channel; the mandibles and scape obscurely rufo-piceous; the clypeus thinly clothed with aurichalceous pubescence; wings dark fuscous; the legs black, finely pubescent; the calcaria, spines and claws obscurely ferruginous, sometimes nearly black. Abdomen red, smooth and shining, the segments covered laterally with a dense sericeous pubescence; the two apical segments black; in some examples the apical margin of the fourth segment is also black, in other instances the entire segment; another variety has the basal and apical segments black.

Hab. India; Africa. (Coll. F. Smith.)

This species closely resembles *L. anathema*, from which it is distinguished by the colouring of the abdomen, by not having an impressed line on the vertex, or a longitudinal central carina, and by the truncation of the metathorax being punctured, not transversely finely strigose.

6. LARRADA AURULENTA. Pl. VII. fig. 5. B.M.

Sphex aurulenta, *Fabr. Mant.* i. 274. 10.
Sphex aurata, *Fabr. Ent. Syst.* ii. 213. 64.
Pompilus auratus, *Fabr. Ent. Syst. Supp.* 250. 25.
Liris aurata, *Fabr. Syst. Piez.* 228. 3.
Dahlb. Hym. Europ. i. 135.
Tachytes opulenta, *St. Farg. Hym.* iii. 246. 7.
Lyrops auratus, *Guér. Icon. Règ. Anim.* iii. 440.

Hab. India; China; Java; Sumatra; Celebes; Philippine Islands; Africa (the Cape of Good Hope; the Gambia).

Specimens of this species received from the Cape and the Gambia agree with the Indian ones in sculpture, but differ considerably in colour; they have the antennæ ferruginous, with a few of the apical joints more or less fuscous; the wings are much darker, and the anterior legs only are ferruginous; the apical segment of the abdomen is more or less ferruginous;—but we can only regard this as a climatic variety.

7. LARRADA CONSPICUA.

Female. Length 7 lines.—Black: the anterior margin of the clypeus, the scape and mandibles, ferruginous, the latter black at their tips; the extreme apex of four or five of the basal joints of the flagellum ferruginous; the face covered with silvery pubescence, which has a faint golden tinge. The tegulæ, legs, apical and two basal segments of the abdomen, ferruginous; the wings yellowish hyaline, the apical margins with a dark fuscous border, the nervures pale ferruginous; the metathorax finely transversely striated: probably in examples in fine condition the thorax would have a covering of pale golden pubescence. The third, fourth and fifth segments of the abdomen are dark fusco-ferruginous, not black.

Hab. India. (Coll. W. W. Saunders, Esq.)

8. LARRADA ARGYREA. B.M.

Female. Length 3½ lines.—Black: the face densely covered with silvery pubescence; the mandibles ferruginous, covered with silvery pubescence at the base; the scape of the antennæ rufo-testaceous in front. The metathorax widest at the base, finely shagreened above, the truncation smooth and shining, thinly covered, as well as the sides, with silvery pubescence; the wings hyaline, the nervures and tegulæ pale rufo-testaceous; the tibiæ and tarsi rufo-testaceous, the intermediate and posterior tibiæ with a fuscous stain beneath. Abdomen: the three

basal segments ferruginous, the third with a fuscous band a little beyond the middle; the margins of the following segments pale testaceous, the apical segment ferruginous.

Hab. Northern India.

Div. 2. *Abdomen black.*

9. LARRADA MAURA. B.M.

Sphex maura, *Fabr. Ent. Syst.* ii. 212. 55.
Pompilus maura, *Fabr. Ent. Syst. Supp.* 247. 11.
Liris maura, *Fabr. Syst. Piez.* 230. 10.

Hab. Tranquebar.

Fabricius having placed the *Sphex maura* eventually in the genus *Liris*, which contains species all belonging either to *Tachytes* or *Larrada*, there can be little doubt of the *L. maura* of this Catalogue being identical with the Fabrician insect; it nearly resembles the *L. glabrata*, but has the metathorax closely and strongly punctured above and behind, the verge of the truncation rounded, not sharply truncate; the wings also are subhyaline; the basal margins of the segments of the abdomen finely punctured, smooth and shining, not pubescent.

10. LARRADA TRISTIS. B.M.

Female. Length 4 lines.—Black: the face covered with silvery pubescence, the scape rufo-piceous in front. The mesothorax and scutellum very finely and closely punctured, subopake; the metathorax transversely and somewhat coarsely rugose; the sides of the disk and the truncation very coarse, and covered with short silvery pubescence; the sides of the metathorax obliquely striated; wings yellow-hyaline, the nervures and tegulæ rufo-testaceous. The abdomen with a fine silky pile; the margins of the segments with bands of silvery pile, observable in different lights.

Hab. Borneo.

11. LARRADA SUBTESSELLATA. B.M.

Female. Length 6–7 lines.—Black: the face covered with a fine sericeous silvery pile; the anterior margin of the clypeus smooth and shining; the mandibles rufo-piceous at their apex. Thorax smooth, not shining; in fine examples with a silky down on the lateral and posterior margins of the mesothorax; the wings subhyaline, the nervures fusco-ferruginous, the tegulæ rufo-piceous; the metathorax slightly narrowed towards the apex, above transversely strigose, not coarsely so; the thorax at

the sides and beneath, and also the legs, have a fine silky cinereous pile; the posterior femora bright ferruginous. Abdomen covered with a fine silky pile, that on the posterior margins of the segments silvery; in some lights, the abdomen has a tessellated appearance; the apical segment opake, and having a few scattered rigid hairs.

Hab. India; Sumatra; Java.

This is quoted by Dahlbom as the *Liris maura* of Fabricius, but that author does not mention the silvery pile on the abdomen; we have therefore given the name *maura* to another species. Dahlbom also gives Australia as the locality: the only species from that country agreeing with the description of Fabricius is quite distinct from the present insect, and appears to be one of the varieties of the *femorata* of Saussure.

12. LARRADA LABORIOSA. B.M.

Female. Length 5–6 lines.—Black: the face has a thin silvery pubescence; the mesothorax and scutellum shining, very delicately punctured; the metathorax very finely transversely rugose, the truncation more strongly so; the sides of the metathorax delicately obliquely strigose; the disk has an abbreviated longitudinal carina, and the truncation a deeply impressed line; wings smoky hyaline, the nervures black; the legs thinly covered with sericeous pile. Abdomen covered with a fine changeable pile; that on the apical margins of the segments bright and silvery, but only observable in certain lights.

Hab. Philippine Islands.

Closely resembling *L. vigilans*, but easily distinguished by the sculpture of the metathorax.

13. LARRADA EXILIPES. B.M.

Male. Length 3½ lines.—Black: covered with short changeable silvery pile, which is most dense on the sides and apex of the metathorax and on the apical margins of the segments of the abdomen; the face with a dense bright silvery pubescence. The metathorax irregularly transversely rugose, with some coarse grooves at the sides and on the truncation, which has in the middle a deeply impressed fossulet; the wings hyaline, with the apical margins slightly fuscous; the nervures and tegulæ rufotestaceous; the posterior femora bright ferruginous; the legs slender and elongate.

Hab. Northern India.

This is probably the male of *L. subtessellata*.

14. LARRADA GLABRATA. B.M.

Female. Length 7 lines.—Black: the head smooth and shining; the antennæ rufo-fuscous, the scape smooth, shining and rufo-piceous in front; the mandibles ferruginous. The mesothorax closely punctured, and having a sparing short fuscous pubescence; the metathorax elongate, the sides parallel, the apex abruptly truncate, above rugose, with a central longitudinal carina, which extends to the verge of the truncation; the latter has an impressed line in the centre, is shining and delicately punctured, with the lateral margins roughened; the wings fuscous, the tegulæ rufo-testaceous; the sides of the pectus and the femora ferruginous, the latter incrassate; the intermediate and posterior tibiæ and the tarsi thickly spined, the spines dark ferruginous. Abdomen elongate, smooth, shining and impunctate.

Hab. Celebes.

15. LARRADA JACULATOR. B.M.

Female. Length 6 lines.—Black: the face and cheeks with a fine short silvery pubescence; that on the former has a faint golden tinge; the apex of the mandibles rufo-piceous. The mesothorax and scutellum smooth shining and delicately punctured; the sides of the former with a fine short pale yellow pubescence; the metathorax, legs and abdomen covered with a changeable silvery pile; the metathorax finely shagreened and having a central longitudinal carina, not extending to the verge of the truncation; the truncated portion very finely transversely strigose, and having a central longitudinal impressed line; wings flavo-hyaline, darkest towards the base of the anterior pair, their apical margins faintly clouded, the nervures pale ferruginous. Abdomen sericeous; in some lights the apical margins are seen to have bright silvery fasciæ; the apical segment covered with silvery pubescence and rounded at the apex.

Hab. North Bengal.

16. LARRADA VIGILANS. B.M.

Female. Length 6 lines.—Black: the face thinly covered with silvery pubescence; the mandibles rufo-piceous; the mesothorax and scutellum smooth; the wings subhyaline, the nervures testaceous; the metathorax transversely rugose and having a longitudinal impressed line, which is continued to the verge of the truncation, the latter transversely rugose; the spines on the tibiæ and tarsi ferruginous; the apical margins of the segments of the abdomen with fasciæ of bright silvery pile, only observable

in certain lights; the apical segment rugose, the extreme apex ferruginous.

Hab. China.

Species of Africa.

Div. 1. *Abdomen red, or red and black.*

17. LARRADA HÆMORRHOIDALIS. B.M.

Pompilus hæmorrhoidalis, *Fabr. Syst. Piez.* 198. 55.
Lyrops Savignyi, *Spin. Ann. Soc. Ent. Fr.* vii. 476. 26 (1838).
Liris orichalcea, *Dahlb. Hym. Europ.* i. 135.
Liris Savignyi, *Dahlb. Hym. Europ.* i. 471. 2.
Tachytes illudens, *St. Farg. Hym.* iii. 249. 12.

Hab. Africa (Egypt; Sierra Leone; Gambia); India (Punjaub, &c.).

18. LARRADA ABDOMINALIS.

Larra abdominalis, *Guér. Voy. Abyss. Lefeb.* vi. 358. t. 8. f. 7.

Hab. Abyssinia.

19. LARRADA RUBELLA.

Female. Length 5 lines.—Head, thorax and legs black; the face covered with bright silvery pubescence; the base of the mandibles and the cheeks thinly covered with silvery pubescence; the palpi, mandibles and scape in front obscurely ferruginous. The mesothorax and scutellum closely punctured, the metathorax coarsely rugose; the wings subhyaline, their apical margins with a broad fuscous cloud, the nervures and tegulæ dark ferruginous. Abdomen dark red, the basal segment more or less black at the sides; the apical margins of the segments with fasciæ of silvery pubescence.

Hab. Fernando Po. (Coll. W. W. Saunders, Esq.)

20. LARRADA RUFIVENTRIS.

Larrada rufiventris, *Spin. Ann. Soc. Ent. Fr.* vii. 479. 15 ♀ (1838).

Hab. Egypt.

Div. 2. *Abdomen black.*

21. LARRADA NIGRITA. B.M.

Tachytes nigrita, *St. Farg. Hym.* iii. 241. 2.
Lucas, Explo. Sc. Algér. iii. 247. t. 13. f. 10.

Hab. Algeria; Madeira.

The example in the Museum Collection agrees with the description of St. Fargeau in every respect except a slight difference in the sculpture of the metathorax, which is finely transverse-striate and coarsely ridged at the sides, the truncation transversely grooved.

22. LARRADA TARSATA.

Lyrops tarsalis, *Spin. Ann. Soc. Ent. Fr.* vii. 478. 27 ♂ (1838).
Hab. Egypt.

23. LARRADA GENICULATA.

Lyrops geniculata, *Spin. Ann. Soc. Ent. Fr.* vii. 480. 29 ♀ (1838).
Hab. Egypt.

24. LARRADA ERYTHROPUS.

Lyrops erythropus, *Spin. Ann. Soc. Ent. Fr.* vii. 479. 28 ♀ (1838).
Hab. Egypt.

This may possibly be identical with the *L. pallipes*; but Spinola does not mention the sculpture of the metathorax, which in this genus appears to offer the best specific distinctions.

25. LARRADA MEMNONIA. B.M.

Female. Length 7 lines.—Black: the face covered with silvery pubescence, the mandibles obscurely rufo-piceous, the apical joints of the palpi pale testaceous. The thorax covered with a fine silvery pile, as well as the legs; the tarsi and apex of the tibiæ ferruginous; the wings fulvo-hyaline, the nervures and tegulæ behind rufo-testaceous; the scutellum smooth and shining; the metathorax finely transversely striated, and having a central abbreviated carina not extending to the verge of the truncation, the striæ coarser at the sides, the truncation also coarsely striated. The apical margins of the segments of the abdomen with fasciæ of changeable silvery pile.

Hab. Egypt; Senegal.

26. LARRADA OBLIQUA. B.M.

Female. Length 4 lines.—Black: the face thinly covered with silvery pubescence. Thorax: the mesothorax very closely and finely punctured, as is also the scutellum; the metathorax with a central impressed line which extends to the verge of the truncation; on each side the disk is obliquely striated; the truncation transversely striated, and having a central carina which

terminates in a deep fossulet above; wings hyaline, faintly clouded at their apical margins, the nervures testaceous; the two apical joints of the tarsi ferruginous. Abdomen thinly covered with a fine thin sericeous pubescence, the three basal segments slightly depressed.

Hab. Cape of Good Hope.

27. LARRADA ATERRIMA.

Female. Length 4½ lines.—Deep opake black: the face with bright silvery pubescence; the mesothorax with a central longitudinal depression in front, on each side of which is an elongated slightly impressed line, and also a short scratch opposite the front of the tegulæ, the latter rufo-piceous behind; the wings smoky, the nervures black; the metathorax very delicately transversely striated, the sides obliquely so, and the truncation with coarse transverse ridges and a central longitudinal deeply impressed line. Abdomen: the basal segment and the apical margins of the segments with bright silvery fasciæ, observable in certain lights.

Hab. Cape of Good Hope. (Coll. F. Smith.)

28. LARRADA PALLIPES. B.M.

Male. Length 4 lines.—Black, and covered with a grey silky pile; the face densely covered with bright silvery pubescence; the palpi, mandibles and scape ferruginous. The mesothorax and scutellum closely punctured; the metathorax transversely rugose; a central longitudinal carina extends to the verge of the truncation; the sides of the metathorax obliquely strigose; the wings subhyaline and iridescent, the nervures and tegulæ pale rufo-testaceous; the legs pale ferruginous, the coxæ and trochanters fuscous; the apical margins of the segments of the abdomen slightly depressed.

Hab. Africa.

This may possibly be the male of *L. ferrugineipes*, but the metathorax is longer and much more coarsely sculptured.

29. LARRADA PUNCTATA.

Female. Length 3½ lines.—Black: the head, the mesothorax above and beneath, the scutellum and metathorax, closely and finely punctured; the sides of the latter obliquely striated, the truncation transversely so; the face with fine sericeous pubescence; the mandibles ferruginous; wings fuscous and iridescent;

the apical joints of the tarsi ferruginous. The apical margins of the segments of the abdomen obscurely rufo-piceous.

Hab. Cape of Good Hope. (Coll. F. Smith.)

30. LARRADA SOLSTITIALIS. B.M.

Female. Length 8–9 lines.—Black, and covered with a fine silky silvery pile; the face, sides of the scape, and base of the mandibles covered with silvery pubescence which has a faint golden tinge; the thorax above has a similar clothing to the face, most dense on the lateral and posterior margins of the mesothorax and on the sides of the metathorax, the disk of the latter transversely striated, its sides and also the truncation coarsely so; the truncation has a central longitudinal impressed line deepest towards the verge of the truncation; the wings flavo-hyaline, their apical margins with a fuscous cloud, the nervures and tegulæ rufo-testaceous; the posterior femora ferruginous; the spines which arm the tibiæ and tarsi ferruginous. The abdomen with changeable silvery fasciæ on the apical margins of the segments.

Hab. Port Natal.

This species most closely resembles the *L. subtessellata*, but its metathorax is differently sculptured; the nervures of the wings are also of a different colour.

31. LARRADA CILIATA. B.M.

Female. Length 5 lines.—Black: the face covered with silvery pubescence; the tips of the mandibles ferruginous. Thorax: the mesothorax and scutellum smooth, shining, and very delicately punctured; the metathorax transversely striated, the sides of the disk and the truncation coarsely so; the sides of the metathorax obliquely striated; the wings fuscous, their apical margins with a darker cloud; the nervures and tegulæ testaceous; the tarsi ferruginous, the anterior pair with long dark-coloured flattened cilia, the spines which arm the intermediate and posterior pairs long and black. Abdomen without fasciæ: probably in fine condition it would have silvery bands.

Hab. South Africa.

32. LARRADA FERRUGINEIPES. B.M.

Tachytes ferrugineipes, *St. Farg. Hym.* iii. 248. 11.

Hab. Senegal; Congo.

The example believed to be the species described by St. Far-

geau has the metathorax transversely rugose. St. Fargeau does not mention the sculpture; his description would suit three or four species, and is very incomplete.

33. LARRADA IRRORATA.

Female. Length 7 lines.—Black: the face densely clothed with golden pubescence; the cheeks and vertex have a thin golden pile. The mesothorax thinly covered with rich golden pile on the sides of the thorax; beneath, and on the metathorax, it is silvery; the disk of the metathorax transversely rugose; wings flavo-hyaline, their apical margins faintly clouded; the spines which arm the tibiæ and tarsi ferruginous. Abdomen covered with changeable silky pile; the margins of the segments having fasciæ of silvery pile, observable in different lights.

Hab. Senegal. (Coll. F. Smith.)

34. LARRADA AGILIS.

Female. Length 5 lines.—Black: the face thinly covered with silvery pubescence; the scape, mandibles and anterior margin of the clypeus bright ferruginous; the vertex smooth, without the usual tubercles or ridges which replace the posterior ocelli. Thorax with a scattered glittering silvery pubescence; the metathorax longitudinally rugose in the middle, the sides of the disk transversely striated, as well as the truncation, which is coarsely grooved, and has a deeply impressed line in the centre; the sides of the metathorax obliquely striated; the wings hyaline, their apical margins faintly clouded, the nervures and tegulæ behind, rufo-testaceous; the tarsi bright ferruginous, their basal joint black; the tips of the posterior femora with a patch of ferruginous pubescence within; the posterior tibiæ not grooved longitudinally, as in the majority of the species. Abdomen attenuated at the base and apex, narrow and elongate; the posterior margins of the segments covered with silvery pile, observable in different lights.

Hab. The Gambia. (Coll. F. Smith.)

35. LARRADA CRŒSUS.

Female. Length 7 lines.—Black: the head, thorax and abdomen covered with golden pubescence; on the vertex it is sparing, and the apical margins of the segments of the abdomen have bright golden fasciæ, which are more or less brilliant in different lights; the mandibles and scape in front dark rufo-piceous; the sides of the thorax, the coxæ and femora, covered with cinereous pile, that on the tibiæ and tarsi golden; the tarsi, the spines

which arm the tibiæ, and the apical segment of the abdomen, ferruginous; the wings yellow, with a broad dark fuscous border.

Hab. The Gambia. (Coll. F. Smith.)

36. LARRADA SERICEA.

Female. Length 6 lines.—Black: the face covered with golden pubescence; on the cheeks and base of the mandibles it is silvery; the mandibles and scape ferruginous, the former black at their tips. The thorax covered with cinereous pubescence; on the mesothorax it is very short and sparing, but dense and longer on the metathorax; a spot of golden pubescence in front of the tegulæ; the legs ferruginous, with the coxæ and trochanters black; the wings hyaline, their nervures and tegulæ ferruginous. Abdomen covered with a grey sericeous pile, the apical margins of the segments with bands of bright silvery pile, very brilliant in some lights, the apical segment smooth and shining.

Hab. The Gambia. (Coll. F. Smith.)

Species of Australia.

Abdomen black.

37. LARRADA AUSTRALIS. B.M.

Tachytes Australis, *Sauss. Mém. Soc. Phys. Genève*, xiv. fasc. 1. 19. 8. t. f. 7 ♀.

Hab. New Holland.

38. LARRADA FEMORATA. B.M.

Tachytes femoratus, *Sauss. Mém. Soc. Phys. Genève*, xiv. fasc. 1. 20. 9. t. f. 6 ♂.

Female. Length 6½ lines.—Black: the head smooth and shining, the face has a little silvery pubescence, the mandibles ferruginous. Thorax opake; the mesothorax and scutellum very closely punctured; the metathorax very finely shagreened, the sides parallel; the legs ferruginous, the coxæ, trochanters and anterior legs black; the anterior tarsi, apex of the tibiæ and knees rufo-piceous; the wings smoky and iridescent, the tegulæ testaceous. Abdomen smooth, shining and very delicately punctured, the margins of the segments with a silvery border and narrowly rufo-piceous, particularly the three apical ones; the apical segment triangular, margined at the sides, and with a few large punctures.

Hab. New Holland.

Species of South America.

Div. 1. *Abdomen red, or red and black.*

39. LARRADA PAGANA.

Tachytes pagana, *Dahlb. Hym. Europ.* i. 132.

Hab. Island of St. Crucis.

40. LARRADA FULVIVENTRIS.

Lyrops fulviventris, *Guér. Icon. Règ. Anim.* iii. 440.

Hab. Cuba.

41. LARRADA RUBRICATA. B.M.

Female. Length 4½ lines.—Head and thorax black; the face densely covered with silvery pubescence; the mandibles ferruginous. Thorax opake, the metathorax delicately shagreened, the lateral margins raised and having a little silvery pubescence; the apex abruptly truncate, the truncation covered with silvery pubescence; the legs have a fine silvery silky pile; the claws ferruginous; the wings hyaline, their apical margins slightly fuscous, the nervures and the tegulæ ferruginous. Abdomen ferruginous, the apical margins of the segments with fasciæ of silvery pile, observable only when viewed in some positions; the apical segment shining, and with a few scattered punctures.

Hab. Brazil (Para). (Coll. H. W. Bates.)

Div. 2. *Abdomen black.*

42. LARRADA CAMPESTRIS. B.M.

Female. Length 5–6 lines.—Black: the face with bright pale golden pubescence; the head behind, the eyes and the mandibles at their base, with similar pubescence, in some lights having a bright silvery lustre, in others a golden brilliancy; the meso- and metathorax have a similar pubescence; the wings yellow at their base, slightly fuscous at their apex; the metathorax very finely granulated, the truncation abrupt, its margin slightly raised; the claws ferruginous, their tips black; the basal segment of the abdomen and the apical margins of the following segments with bright changeable silvery pubescence, very brilliant in some lights, but scarcely discernible in others.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

43. LARRADA CORONALIS. B.M.

Female. Length 6–7½ lines.—Black: the face shining; the clypeus covered with thin silvery pile; a smooth shining carina at the inner orbit of the eyes extending from opposite the insertion of the antennæ to the anterior stemma; the vertex densely covered with golden pubescence, a rounded spot of the same on the mesothorax; the metathorax elongate, smooth and opake above, the apex truncate, the sides and upper margin transversely strigose, with a longitudinal channel deeply impressed; the angles of the truncation with a macula of bright silvery pubescence; wings subhyaline, with a transverse fuscous cloud towards their apex; the nervures black; the marginal cell truncate at the apex; the legs have a fine cinereous pile, at the apex of the posterior tibiæ it is golden. Abdomen covered with a changeable pile, which has shades of purple, silver, or violet in different lights; on the lateral apical margins of the three basal segments a large patch of bright silvery pubescence; the segments also have lateral spots of silvery pile beneath; the apical segment very smooth and shining above, with a longitudinal carina on each side.

Hab. Brazil (the Amazons; Villa Nova). (Coll. H. W. Bates.)

44. LARRADA DECORATA. B.M.

Female. Length 7 lines.—Black: covered with a fine changeable silky pile, which in different lights is bright and silvery in parts; it is very brilliant on the apical margins of the segments of the abdomen, the truncation of the metathorax, and on the pectus, coxæ and femora beneath; the face and head behind the eyes covered with bright pale golden pubescence; the mesothorax has a deep depression in front, which is covered with golden pubescence, as are also the lateral and posterior margins; the metathorax has also a similar pubescence; the wings yellow, their apical margins with a broad fuscous cloud, the nervures pale ferruginous.

Hab. Brazil (Para). (Coll. H. W. Bates.)

45. LARRADA ANTICA.

Male. Length 4½ lines.—Black: the face covered with golden pubescence; the scape in front and the tips of the mandibles ferruginous. Thorax: the metathorax densely covered with golden pubescence; the wings subhyaline, a dark fuscous stripe runs from the base to the apex of the anterior pair; the posterior pair are faintly clouded at their apex; the tips of the femora, the tibiæ and tarsi rufo-testaceous. Abdomen: the apical margins

of the segments narrowly rufo-testaceous, the base with a fine cinereous pile.

Hab. Brazil (Amazons). (Coll. W. W. Saunders.)

46. LARRADA FULIGINOSA.

Larra fuliginosa, *Dahlb. Hym. Europ.* i. 138 & 472. 3.

Hab. Cuba.

47. LARRADA FULVIPES. B.M.

Female. Length 7–8 lines.—Black: the head wider than the thorax; the face covered with silvery pubescence; the anterior margin of the clypeus rounded; the palpi and mandibles ferruginous. The thorax covered with a fine silky silvery pubescence, most dense at the sides of the mesothorax, on the post-scutellum and at the sides of the metathorax, the latter rounded behind; the wings hyaline, faintly tinted with yellow, the nervures and tegulæ of a fulvous-red; the legs of the same colour; the coxæ black; the marginal cell narrowed and rounded at the apex; the first transverse cubital nervure nearly straight. Abdomen: a little short silky pubescence at the base; the apical margins of the three basal segments with bands of silvery pubescence; the apical segment margined at the sides; the apex rounded, and with an obscure fusco-ferruginous pubescence.

Hab. Brazil; Jamaica; St. Domingo.

This species resembles *Tachytes Etrusca*, but the second submarginal cell is much wider towards the marginal cell; the head is wider than the thorax, and the abdomen has only three silvery bands; and the femora as well as the tibiæ and tarsi are red.

48. LARRADA IGNIPENNIS. B.M.

Female. Length 7 lines. — Black: the face covered with silvery pubescence, as well as the cheeks and base of the mandibles. Thorax: the legs, thorax beneath, the breast and first segment of the abdomen beneath, covered with fine silky pile, very brilliant in certain lights; the meso- and metathorax subopake, the latter having a shallow indistinct longitudinal furrow; the lateral margins slightly raised, and with a few transverse raised carinæ; the truncation smooth in the middle, and having a few striæ at its upper margin, which is slightly raised; in the middle is a deep longitudinal furrow; the wings bright ferruginous, with a broad fuscous border at their apical margins. Abdomen with a fine silky pile, the apical margins of the segments with bright silvery fasciæ, varying in brilliancy in different lights;

the apical segment covered with silvery pubescence, with a smooth shining naked space at the base.

The male agrees with the female in general colouring, but is smaller.

Hab. St. Domingo.

49. LARRADA LATERISETOSA. B.M.

Larra laterisetosa, *Spin. Mem. Accad. Torino*, xiii. 58. 41 (1853).

Hab. Brazil (Para).

50. LARRADA LUCTUOSA. B.M.

Female. Length 7–8 lines.—Black: the face, scape in front, cheeks and mandibles, covered with fine silvery silky pubescence; the anterior margin of the clypeus emarginate in the middle. Thorax: the mesothorax and scutellum closely and finely punctured; the metathorax delicately transversely striated, the sides obliquely so; the truncation coarsely rugose, the striation running in a circular direction; the margin of the truncation slightly rounded, not sharp or abrupt; the wings smoky-hyaline, the nervures black, the tegulæ shining; the legs have a fine cinereous pile; the tibiæ and tarsi strongly spinose. Abdomen sericeous, the margins of the segments with bright silvery fasciæ.

Hab. St. Domingo; Brazil.

51. LARRADA NITIDIUSCULA. B.M.

Female. Length 3 lines.—Black: the face covered with silvery pubescence, having a smooth space in the middle, extending from the anterior ocellus to the insertion of the antennæ; the mandibles pale rufo-testaceous, their apex rufo-piceous. The mesothorax and scutellum shining; the metathorax finely roughened, but shining; a faintly impressed longitudinal line in the middle, terminating in a deep fovea at the verge of the truncation; the latter shining, with a triangular fovea close to the upper margin in the middle; the sides of the metathorax with a little silvery pubescence; the thorax shining beneath; the tibiæ and tarsi pale rufo-testaceous; wings hyaline and iridescent, the nervures, extreme base of the wings, and the tegulæ, pale testaceous. Abdomen smooth and shining, with a fine silky pile, the apical margins of the segments narrowly pale testaceous.

Hab. Brazil (Santarem). (Coll. H. W. Bates.).

52. LARRADA QUADRIFASCIATA. B.M.

Female. Length 4 lines.—Black: the face densely covered

with silvery pubescence. Thorax: the mesothorax very closely and finely punctured, the lateral margins covered with fine sericeous pile; the metathorax finely shagreened, the apex abruptly truncate, the truncation covered with silvery pubescence; the wings hyaline, with a faint cloud on their apical margins; the nervures testaceous, as well as the tegulæ behind; the thorax beneath and the legs have a fine silky pile. The apical margins of the four basal segments with fasciæ of silvery pile, observable in different lights; the apical segment covered with silvery pubescence, the tip ferruginous.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

53. LARRADA SUBPETIOLATA. B.M.

Female. Length 3 lines.—Black: the face silvery; the mandibles pale ferruginous, black at their base. The thorax covered with a fine thin cinereous pile, subopake; the metathorax delicately shagreened, the truncation abrupt and covered with bright silvery pubescence; the wings fusco-hyaline, their apical margins darkest; the nervures and tegulæ rufo-testaceous; the spines which arm the tibiæ and tarsi, not the calcaria, short, sparing, and pale testaceous. The abdomen subpetiolate, the apical margins of the segments with fasciæ of silvery pile, observable in different lights.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

54. LARRADA TRIFASCIATA. B.M.

Female. Length 4½ lines.—Black: the face, cheeks, and base of the mandibles covered with fine silvery sericeous pile. The mesothorax very delicately punctured, the punctures confluent; the metathorax opake, the sides and apex with a fine cinereous pile; the truncation abrupt, with the margin at its verge slightly raised; the sides of the truncation, and also of the disk, transversely striated; the wings subhyaline, their apical margins with a fuscous border; the nervures black. The thorax beneath and the legs covered with a fine changeable cinereous pile. Abdomen sericeous, with fasciæ of silvery pile on the apical margins of the three basal segments; the apical segment covered with silvery pubescence.

Hab. St. Domingo.

55. LARRADA TRUNCATA.

Female. Length 5 lines.—Black: the face, mandibles, and head behind the eyes covered with golden pubescence; the anterior margin of the clypeus truncated, the angles of the truncation

acute. Thorax: above clothed with golden pubescence, which is most sparing in the middle; on the sides, beneath, and on the legs, is a fine silky silvery pile; wings yellow-hyaline, with a broad fuscous apical margin; the nervures yellow towards the base of the wings, and fuscous towards their apex. Abdomen: the apical margins of the segments with broad pale golden bands, the apical segment obtuse and covered with pale pubescence.

Hab. Brazil. (Coll. F. Smith.)

Species of North America.

Div. 1. *Abdomen red and black.*

56. LARRADA ANALIS. B.M.

Larra analis, *Fabr. Syst. Piez.* 220. 8.

Hab. Carolina; United States (Delaware).

57. LARRADA LÆVIFRONS. B.M.

Female. Length 4½ lines.—Head and thorax black; the face thinly covered with silvery pubescence; the vertex with merely a slight elevation above the anterior ocellus, with two smooth spaces behind, between them a smooth shallow channel which passes a short way upwards towards the vertex terminating in a smooth fovea. Thorax opake; the metathorax finely shagreened, and having at the sides a little cinereous pubescence; wings hyaline, the nervures testaceous; the apical joints of the tarsi rufo-testaceous. Abdomen: the three basal segments red, the apical ones black; thinly covered with cinereous pile, the apical segment very smooth and shining.

Hab. East Florida (St. John's Bluff).

58. LARRADA TERMINATA. B.M.

Male. Length 3 lines.—Black: the head closely and rather strongly punctured; an impressed line runs backwards from the tubercles, which replace the two posterior ocelli, to the margin of the vertex; the face covered with silvery pubescence. The mesothorax shining and punctured; the metathorax shagreened; the thorax above with a scattered short cinereous pubescence; the wings hyaline and iridescent, the nervures testaceous; the apical joints of the tarsi rufo-testaceous. Abdomen shining, delicately punctured; the apical margins of the segments slightly depressed and narrowly rufo-piceous; the two apical segments

of the abdomen ferruginous; the abdomen above is scattered over with short glittering hairs.

Hab. North America (Trenton Falls). (Coll. W. W. Saunders, Esq.)

Div. 2. *Abdomen black.*

59. LARRADA ARGENTATA. B.M.

Larra argentata, *Pal. de Beauv. Ins. Afric. et Amér.* 119. t. 3. f. 9. *Say, Bost. Journ.* i. 370.

Hab. United States.

60. LARRADA DISTINCTA. B.M.

Female. Length 5 lines.—Black: the scape at its apex beneath and the tips of the mandibles ferruginous; the clypeus with a few large punctures. The mesothorax and scutellum very finely and closely punctured; the metathorax with a central longitudinal impressed line, on each side being obliquely striated, the striation slightly curved; the margin of the truncation rugose, beneath which it is transversely striated; wings hyaline, the nervures and tegulæ rufo-testaceous; the two apical joints of the tarsi rufo-testaceous. Abdomen smooth and shining, the apical segment with scattered punctures.

Hab. New York.

Very like *arcuata*, but at once distinguished by the sculpture of the metathorax.

61. LARRADA PENNSYLVANICA. B.M.

Larra Pensylvanica, *Pal. de Beauv. Ins. Afric. et Amér.* 118. t. 3. f. 8.

Hab. St. John's Bluff; East Florida; North America.

62. LARRADA CANESCENS. B.M.

Female. Length 5 lines.—Black: thinly covered with short cinereous pubescence, the abdomen being covered above and beneath; the head, mesothorax and scutellum strongly punctured; the metathorax shagreened; the flagellum much thickened towards the base, which is again more slender; the wings brown, the posterior pair clearer at the base; the anterior tibiæ and tarsi obscure ferruginous. Abdomen: on the apical margins of the segments the pubescence is bright and silvery, observable in different lights.

Hab. Georgia.

63. LARRADA TENUICORNIS. B.M.

Female. Length 6 lines.—Jet-black and shining, not pubescent; the head and mesothorax very closely punctured; the anterior margin of the clypeus highly polished, and with a few large punctures; the antennæ slender and elongate, longer than the head and thorax; the metathorax transversely strigose, and having a central longitudinal slightly impressed line, which expands into a broad shallow fovea at the verge of the truncation; the latter oblique, with a large fovea above, from which emanates a narrower impressed line, which runs down to the base; wings dark brown; the apical joints of the tarsi obscure rufo-testaceous. Abdomen elongate, very acute at the apex.

Hab. California.

64. LARRADA ARCUATA. B.M.

Female. Length 4½ lines.—Black: the face with silvery pubescence; the mesothorax subopake; the scutellum shining and finely punctured; the metathorax with an arcuate striation, the striation curving forwards, interrupted in the middle by a longitudinal carina which runs to the verge of the truncation; the latter has a small triangular shape crossed by coarse arcuate striæ, in the middle of which is a deep fovea; from the fovea a carina runs downwards to the base; on each side of the carina the truncation is smooth, and covered with silvery-white pubescence; wings subhyaline, with a faint cloud at their apical margins; the two apical joints of the tarsi obscure rufo-testaceous. Abdomen smooth and shining, with the apical segment rugose.

Hab. Canada.

Genus 2. LARRAXENA.

Larraxena, *Smith, Ann. & Mag. Nat. Hist.* ser. 2. vii. 30 (1851).

1. LARRAXENA PRINCEPS. B.M.

Larraxena princeps, *Smith, Ann. & Mag. Nat. Hist.* 2nd ser. vii. 30.

Hab. Brazil.

Genus 3. MORPHOTA.

Head compressed, a little wider than the thorax; antennæ filiform, inserted at the base of the clypeus; the vertex slightly convex, the ocelli placed in a triangle forward on the vertex; eyes large, oval, lateral, their inner orbit straight; the mandibles

arcuate, with a dentation on the exterior towards the base. Thorax oval, the collar transverse; the metathorax of about equal length to the mesothorax, truncated posteriorly; the superior wings with one marginal cell appendiculated and truncated at its apex; three submarginal cells, the first longer than the two following; the second triangular, with the angles truncated; the third oblique, oblong, of equal width; the legs moderately long, spinose. Abdomen ovato-conical, acute at the apex.

This genus closely resembles *Larrada*, but differs principally in the neuration of the wings and in having three distinct ocelli.

1. MORPHOTA FASCIATA. B.M.

Female. Length 3¼ lines.—Head and thorax black; the clypeus covered with silvery pubescence; the vertex smooth; an impressed line runs from the anterior ocellus to the insertion of the antennæ; the mandibles and scape in front rufo-piceous; the thorax and legs with a fine thin glittering silky pile; the anterior wings have a transverse fascia crossing the second and third submarginal cells, the extreme apex slightly clouded; metathorax opake, very finely shagreened; the scutellum smooth and shining. Abdomen: the two basal segments and the base of the third segment ferruginous, the apical segments black; the apical margins of the second and third segments covered with silvery pile.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

2. MORPHOTA CONCINNA. B.M.

Female. Length 3–3½ lines.—Head and thorax black and shining; the head covered with a delicate silky pile, the clypeus with bright silvery pubescence; the mandibles ferruginous. The metathorax flattened above and longitudinally striated, the striæ slightly waved; the truncation highly polished, with a deep fossulet in the middle above, the sides with a few transverse coarse striæ; wings hyaline, beautifully iridescent, with a faint transverse fascia crossing the second and third submarginal cells, the nervures rufo-testaceous. Abdomen: the three basal segments ferruginous, the three apical black; the apical margins of the second and third segments covered with silvery pile.

Hab. Brazil (Tapajos).

3. MORPHOTA HARPACTOIDES. B.M.

Female. Length 5 lines.—Black: the face and cheeks densely covered with silvery pubescence, the head having a fine short downy pile. Thorax and legs covered with silvery pile, very

bright in different lights; the metathorax finely rugose, and with a central longitudinal carina which extends to the verge of the truncation; wings hyaline, faintly clouded at their apical margins, the nervures pale testaceous; the intermediate and posterior tibiæ with a double row of pale testaceous spines externally. Abdomen with the two basal segments ferruginous, covered with a fine downy pile; the apical margins of the second and third segments with fasciæ of silvery pile, only observable in certain lights.

Hab. Brazil.

Genus 4. TACHYTES.

Apis, pt., *Rossi, Faun. Etrus. Mant.* i. 143 (1792–4).
Sphex, pt., *Fabr. Ent. Syst.* ii. 215 (1793).
Lyrops, *Illig. Ed. Faun. Etrus.* (1807).
Tachytes, *Panz. Krit. Revis.* (1806).
Larra, *Panz. Faun. Germ.* 89. 13.

The genus *Tachytes*, as treated in this Catalogue, contains those species only which possess the following characters,—the type being the *Tachytes pompiliformis* of Panzer.

Head transverse, wider than the thorax; the mandibles large, arcuate and acuminate, within bidentate, deeply emarginate on the exterior towards the base, or notched, forming a dentate process. Thorax ovate; the prothorax almost concealed beneath the convex gibbosity of the mesothorax; the metathorax short, *rounded at the sides, gradually declined above to the apex, not sharply truncated, as broad as long*; the superior wings with one marginal cell, more or less *rounded at the apex*, not *truncated*; three submarginal cells, the second receiving both recurrent nervures. Abdomen short, ovate-lanceolate, subsessile, not longer than the thorax, usually subdepressed above; the apical segment with the disk flat, the margins reflexed.

Species of Europe.

Sect. 1. *Abdomen red and black.*

1. TACHYTES POMPILIFORMIS. B.M.

Larra pompiliformis, *Panz. Faun. Germ.* 89. 13; *Krit. Revis.* ii. 129.
Spin. Ins. Lig. ii. 173. 18.
Larra dimidiata, *Panz. Faun. Germ.* 106. 13 ♀.
Tachytes pompiliformis, *Ván d. Lind*, ii. 21. 5 ♂ ♀.
Shuck. Foss. Hym. 89. 1.
St. Farg. Hym. iii. 252. 15.

Tachytes pectinipes, *Dahlb. Hym. Europ.* 127. 63 (nec *Sphex pectinipes*, Linn.).
Wesm. Hym. Foss. Belg. 72. 3.

Hab. Europe.

2. TACHYTES OBSOLETUS. B.M.

Apis obsoleta, *Rossi, Faun. Etrus. Mant.* i. 143. 318.
Sphex tricolor, *Fabr. Ent. Syst.* ii. 215. 71.
Pompilus tricolor, *Fabr. Ent. Syst. Supp.* 251. 33.
Panz. Faun. Germ. 84. 19.
Larra tricolor, *Fabr. Syst. Piez.* 221. 14.
Spin. Ins. Lig. i. 73. 2.
Jurine, Hym. 145.
Coqueb. Illustr. ii. t. 12. f. 9.
Tachytes tricolor, *Panz. Krit. Revis.* ii. 129.
Lyrops tricolor, *Latr. Gen. Crust. et Ins.* iv. 71.
Tachytes obsoleta, *Van d. Lind, Obs.* ii. 20. 2.
Dahlb. Hym. Europ. i. 133. 67.
St. Farg. Hym. iii. 251. 14.
Lucas, Explo. Sc. Algér. iii. 249.

Hab. France; Germany; Albania; Spain.

3. TACHYTES PANZERI. B.M.

Tachytes Panzeri, *Van d. Lind, Obs.* ii. 20. 4.
Dahlb. Hym. Europ. i. 125. 61.
Wesm. Hym. Foss. Belg. 71. 2.

Hab. France; Germany.

4. TACHYTES BRULLII.

Tachytes bicolor, *Brullé, Expéd. Sc. de Morée*, iii. 373 ♀.

Hab. The Morea.

5. TACHYTES? CRASSICORNIS.

Tiphia crassicornis, *Fabr. Mant.* i. 178. 2.
Larra crassicornis, *Fabr. Ent. Syst.* ii. 221. 5; *Syst. Piez.* 220. 5.
Dumeril, Dict. Sc. Nat. xxv. 285.
Van d. Lind, Obs. ii. 19. 2.

Hab. Spain.

6. TACHYTES NIGRIPENNIS.

Tachytes nigripennis, *Spin. Ins. Lig.* ii. 260.
Van d. Lind, Obs. ii. 20. 3.
Dahlb. Hym. Europ. i. 126. 62.

Hab. Italy; Germany.

Sect. 2. *Abdomen black.*

7. TACHYTES ETRUSCA. B.M.

Andrena Etrusca, *Rossi, Faun. Etrus.* ii. 98. 900. t. 6. f. 11.
Lyrops Etrusca, *Illig. Ed. Faun. Etrus.* ii. 161. 900.
Latr. Gen. Crust. et Ins. iv. 71.
Tachytes Etrusca, *Van d. Lind, Obs.* ii. 19. 1.
St. Farg. Hym. iii. 244. 5.
Dahlb. Hym. Europ. i. 134.
Lucas, Explo. Sc. Algér. iii. 248.

Hab. Italy; Albania; Algeria.

8. TACHYTES UNICOLOR. B.M.

Larra unicolor, *Panz. Faun. Germ.* 106. 16 ♀.
Dahlb. Exercit. Hym. 55. 6.
Tachytes unicolor, *Shuck. Foss. Hym.* 89. 1.
Dahlb. Disp. Méth. Sp. Hym. 11. 44; *Hym. Europ.* i. 129.
Brullé, Hist. Nat. Il. Canar. 91. 54.
St. Farg. Hym. iii. 240. 1.
Lucas, Explo. Sc. Algér. iii. 246.
Tachytes pompiliformis, *Van d. Lind, Obs.* ii. 21. 5. (var.)
Wesm. Hym. Foss. Belg. 71. 1.
Larra Jurinii, *Drapiez, Ann. Gén. Sc. Phys. Brux.* i. 54. t. 4. f. 7 ♂?
Tachytes Jurinii, *Van d. Lind, Obs.* ii. 24. 8?

Hab. Britain; France; Italy; Germany; Scandinavia.

9. TACHYTES ARGENTATA. B.M.

Tachytes argentata, *Brullé, Expéd. Sc. de Morée,* iii. 372. 822 ♂.

Hab. The Morea; Albania.

This is probably the male of *T. Etrusca*: females received in company with *T. argentata*, undoubtedly *T. Etrusca*, have the apical segment covered with golden pubescence; *T. argentata* is described as having the apical segment clothed with silvery pubescence.

Species of Asia.

Sect. 1. *Abdomen red and black.*

10. TACHYTES TARSATUS.

Female. Length 6 lines.—Head and thorax black; the face covered with pale golden pubescence; the mandibles and palpi ferruginous, tips of the former black; the thorax and legs covered with a silvery downy pubescence, most dense on the sides of the

mesothorax above, the sides of the metathorax, on the femora behind, and on the tibiæ outside; the tarsi ferruginous; the spines on the tibiæ and tarsi pale testaceous; wings hyaline, the nervures and tegulæ pale ferruginous. Abdomen ferruginous, the three apical segments black, covered with fine silvery pile; the apical margins of the segments with silvery fasciæ, those on the third, fourth, and fifth broad, nearly covering the segment; the sides of the apical segment carinate, the segment clothed above with golden pubescence.

Hab. India. (Coll. F. Smith.)

11. TACHYTES FERVIDUS.

Female. Length 5½ lines.—Head and thorax black, and covered with short golden pubescence; the antennæ, anterior margin of the clypeus, and the mandibles, ferruginous; the flagellum fuscous above, and the mandibles rufo-piceous at their apex. The wings hyaline, the nervures and tegulæ pale ferruginous; the legs ferruginous, the anterior and intermediate coxæ more or less fuscous. Abdomen ferruginous, thinly covered with changeable short golden down, the margins of the segments with golden bands, which in different lights have a tessellated appearance; in some individuals the fourth segment is slightly fuscous.

Hab. India. (Coll. F. Smith.)

Sect. 2. *Abdomen black.*

12. TACHYTES NITIDULUS. B.M.

Crabro nitidulus, *Fabr. Ent. Syst.* ii. 294. 6; *Syst. Piez.* 309. 7.

Hab. India (Madras; Punjaub); Sumatra; Celebes.

The male of this species is covered with silvery pubescence, the fasciæ on the abdomen being very bright and widened laterally; the anterior tarsi rufo-testaceous.

13. TACHYTES MONETARIUS. B.M.

Female. Length 6–8 lines.—Black: the face, outer orbit of the eyes, and base of the mandibles covered with bright silvery pubescence; the vertex and the thorax covered with a thin short cinereous pubescence; the legs have a similar clothing; the tibiæ outside have a bright silvery pubescence; the calcaria, spines and claws ferruginous; wings subhyaline, the anterior pair fuscous towards their base, darkest at their anterior margins, the apical margins of the wings with a narrow fuscous cloud. Abdomen densely clothed with short rich golden pubescence, which in

different lights has a beautiful tessellated appearance; the base of the abdomen cinereous; beneath, the abdomen is naked, the apical margins of the segments being rufo-piceous.

The male resembles the female, but sometimes has the wings paler.

Hab. Northern India; The Punjaub. (Coll. Gen. Hearsay.)

14. TACHYTES MODESTUS. B.M.

Female. Length 6-6½ lines.—Black: the head and thorax clothed with short silky pale golden pubescence; on the face it is very dense and shining; the scape at the apex in front, the palpi and mandibles rufo-testaceous, the tips of the latter rufo-piceous; the legs pale ferruginous; the coxæ, trochanters and base of the femora black; wings hyaline, the nervures and tegulæ rufo-testaceous. Abdomen thinly covered with a changeable pale golden pubescence; the basal and three following segments have a band of silvery pubescence; the apical segment margined and covered with short silvery hairs.

Hab. India.

15. TACHYTES SINENSIS. B.M.

Female. Length 8 lines.—Black: the face densely covered with golden pubescence, the cheeks and outside of the mandibles thinly so. Thorax covered with pale yellow pubescence; the sides of the mesothorax, the post-scutellum, breast and hinder margin of the tubercles with a bright changeable golden pile; the legs have also a golden pile, and the tibiæ outside are covered with rich golden pubescence; the spines, calcaria and claws pale ferruginous; the wings flavo-hyaline, the nervures and tegulæ rufo-testaceous. The margins of the three basal segments of the abdomen have fasciæ of bright silvery pubescence, which are widest towards the lateral margins; the apical segment margined and covered with fusco-ferruginous pubescence.

The male closely resembles the female, but has the apical segment covered with silvery pubescence.

Hab. North China (Shanghai). (Coll. R. Fortune, Esq.)

Species of Africa.

Sect. 1. *Abdomen red and black.*

16. TACHYTES DICHROA.

Female. Length 8 lines.—Head and thorax black; the scape in front, the palpi and mandibles ferruginous; the face and cheeks

covered with pale golden pubescence. Thorax covered with pale golden pubescence, which is very dense on the sides of the meso- and metathorax; the latter has a central longitudinal channel, and is transversely striated, the apex truncate, the truncation transversely striated, the sides obliquely so; the wings yellowish hyaline, the nervures and tegulæ ferruginous; the legs and abdomen ferruginous; the coxæ and trochanters black; each segment has a large patch of shining silvery silky pubescence on each side; the apical segment covered with silvery pubescence, the margins carinated, the apex slightly emarginate.

Hab. The Gambia. (Coll. F. Smith.)

17. TACHYTES BASILICUS.

Lyrops basilicus, *Guér. Icon. Règn. Anim.* iii. 440.

Hab. Senegal.

Sect. 2. *Abdomen black.*

18. TACHYTES NATALENSIS. B.M.

Tachytes Natalensis, *Sauss. Mém. Soc. Phys. Genève*, xiv. fasc. 1. 21. 10. t. f. 4 ♂.

Hab. Port Natal.

19. TACHYTES ALBOCINCTUS.

Tachytes albocincta, *Lucas, Explo. Sc. Algér.* iii. 250. 219. t. 14. f. 2.

Hab. Algeria.

20. TACHYTES AURIFRONS.

Tachytes aurifrons, *Lucas, Explo. Sc. Algér.* iii. 246. 211.

Hab. Algeria.

21. TACHYTES HIRSUTUS. B.M.

Male. Length 6 lines.—Black: the head and thorax covered with a dense yellow pubescence, which has, in certain lights, a golden lustre; the face with a rich golden pubescence; the mandibles dark rufo-piceous; the palpi pale testaceous. Thorax: the wings hyaline, the nervures rufo-testaceous; the legs have a thin pale pubescence, and are covered with a pale golden pile; the apical joints of the tarsi ferruginous, the calcaria and claws ferruginous, the spines which arm the tibiæ and tarsi pale testaceous. Abdomen: the basal segment clothed with pale golden-yellow pubescence; the apical margins of the first, second and

third segments with a fascia of silvery pubescence; the four apical segments wanting.

Hab. Port Natal.

22. TACHYTES VELOX.

Male. Length 6–8½ lines.—Black: the head and thorax covered with thin ochraceous pubescence; the face densely clothed with pale golden pubescence; the mandibles rufo-piceous at their apex; the palpi pale testaceous. Thorax: the wings fulvo-hyaline, the nervures ferruginous, the costal nervure and the tegulæ rufo-piceous; the apical margin of the anterior wings slightly fuscous; the tibiæ and tarsi at the base covered outside with pale golden downy pile. Abdomen densely clothed with golden pubescence, which in different lights has a tessellated appearance; beneath, smooth and shining; the apical margins of the second and two following segments rufo-piceous, the fifth and sixth margins with bands of golden pubescence.

Hab. Africa (Gambia, W. Africa). (Coll. F. Smith.)

This species resembles *T. monetarius*, but it differs in the colour of the mandibles, the pubescence of the face, head and thorax, and also in having the abdomen entirely covered: in *T. monetarius* the base of the abdomen is black and covered with cinereous pubescence; the wings are also differently coloured.

23. TACHYTES AGILIS. B.M.

Male. Length 4 lines.—Black: the face and cheeks with a little silvery pubescence; the apical joints of the palpi pale testaceous, the basal joints rufo-fuscous. The mesothorax and scutellum finely and closely punctured; the metathorax rugose above, obliquely so at the sides; wings subhyaline, the nervures fusco-ferruginous; the tibiæ, tarsi and apex of the femora bright ferruginous. Abdomen smooth and shining, the margins of the segments with silvery fasciæ; the tip of the abdomen ferruginous.

Hab. Port Natal.

Species of Australia and New Zealand.

Abdomen black.

24. TACHYTES TACHYRRHOSTUS. B.M.

Tachytes tachyrrhostus, *Sauss. Mém. Soc. Phys. Genèv.* xiv. fasc. 1. 18. 7. t. f. 5 ♂.

Female. Length 6–7 lines.—Black: the face covered with

silvery pubescence; the clypeus rounded anteriorly; the mandibles rufo-piceous at their apex. The mesothorax very convex, closely and finely punctured, not shining; the metathorax short, finely shagreened, rounded posteriorly; wings subhyaline, with a beautiful iridescence, the marginal cell without appendage; the nervures and scales ferruginous; the legs covered with silvery pile; the calcaria, spines and claws testaceous. Abdomen smooth and shining, the segments bordered with silvery bands.

Hab. New Holland.

25. TACHYTES HYPOLEIUS. B.M.

Female. Length 5½ lines.—Black: the head subopake and sparingly punctured; the clypeus rounded in front, the sides emarginate; the mandibles rufo-piceous. The mesothorax and scutellum slightly shining, with delicate scattered punctures; the metathorax about the same length as the mesothorax, widest at the base, the apex truncated; the disk finely shagreened, the truncation and sides strigose; the wings fuscous, with a slight violet iridescence; the marginal cell appendiculated, the third submarginal cell curved and of equal width; the posterior tibiæ covered with silvery pile within. Abdomen smooth and shining, covered with a thin silky pile, the apical margins of the segments with silvery bands; the apical segment smooth and shining, not margined at the sides; beneath, very smooth and shining.

Hab. Australia (Swan River).

26. TACHYTES NIGERRIMUS. B.M.

Larra nigerrima, *White, Zool. Erebus and Terror.*

Female. Length 5½ lines.—Intensely black and shining, the face with a thin silvery pubescence; the clypeus rounded anteriorly and emarginate in the middle. The mesothorax and scutellum sparingly and delicately punctured; the metathorax truncate behind, finely shagreened and opake; the truncation transversely striated, the sides obliquely so; the wings hyaline, the nervures black, the marginal cell without an appendage at the apex, having merely a fuscous line. Abdomen short and conical, very smooth and shining.

Hab. New Zealand.

27. TACHYTES SERICOPS. B.M.

Larra sericops, *White, Zool. Erebus and Terror.*

Female. Length 3¼ lines.—Black: the head and thorax covered with short cinereous pubescence, the face covered with silvery

pubescence; the anterior margin of the clypeus rounded; the tips of the mandibles rufo-piceous. The wings hyaline, the nervures rufo-fuscous, the marginal cell truncate at the apex; the hinder margin of the tegulæ pale testaceous; the legs have a changeable silvery pubescence. The abdomen with a brilliant silvery pile, most dense on the apical margins of the segments.

Hab. New Zealand.

Species of South America.

Sect. 1. *Abdomen red and black.*

28. TACHYTES BICOLOR. B.M.

Larra bicolor, *Fabr. Syst. Piez.* 221. 12.

Hab. Brazil (Para; Villa Nova).

29. TACHYTES AMAZONUM. B.M.

Female. Length 6 lines.—Head and thorax black; the face clothed with pale golden pubescence; the mandibles pale rufo-testaceous at the base; the cheeks with a thin golden pubescence. Thorax: the lateral and posterior margins of the mesothorax covered with bright golden pubescence; on the disk it is sparing, short and fulvous; the post-scutellum and sides of the metathorax with a dense golden pubescence; the sides beneath the wings, the breast, the coxæ and legs with a changeable golden lustre, very bright on the posterior tibiæ outside; the knees, tips of the joints of the tarsi, the anterior pair entirely, and the claw-joints ferruginous; the basal joint of the anterior tarsi more or less fuscous above; wings hyaline, the nervures ferruginous, the tegulæ pale rufo-testaceous. Abdomen ferruginous, having, when viewed longitudinally, a golden band on the margin of each segment, but when viewed sideways, the margins appear naked and the intervening parts covered with golden pile; the apical segment carinated at the sides and clothed with golden pubescence; in some examples the third, fourth, and sometimes the fifth segment have a transverse black stripe.

Male.—This sex resembles the female, but is smaller, and has the legs entirely of an obscure red; the abdomen fuscous, with the apical margins of the segments ferruginous; covered with golden pile, and exhibiting the same differences as the other sex.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

30. TACHYTES CONCINNUS. B.M.

Male. Length 4½ lines.—Head and thorax black; the face covered with pale golden pubescence; the mandibles yellow at the base and rufo-piceous towards the apex; the head and thorax have a long thin cinereous pubescence; the cheeks, prothorax, a spot before and another behind the wings, clothed with bright golden pubescence; the legs have a pale golden pile, the tarsi ferruginous, the calcaria and spines which arm the tibiæ of the same colour; the wings hyaline, the nervures and tegulæ pale ferruginous. Abdomen: the first and second segments red, the base of the former black; the apical margins of the three basal segments with bands of pale golden pubescence, the apical segment covered with bright silvery pubescence.

Hab. Brazil (Santarem).

31. TACHYTES UNDATUS. B.M.

Female. Length 3 lines.—Head and thorax black and closely punctured, the face with a silvery pubescence; the sides of the thorax and the legs have also a thin fine short silvery pubescence; the apical joints of the tarsi ferruginous; the spines which arm the tibiæ and tarsi pale testaceous; the wings hyaline and iridescent, the nervures black. Abdomen ferruginous, smooth and shining.

Hab. Brazil (Villa Nova).

32. TACHYTES CHILENSIS.

Larra Chilensis, *Spin. Gay's Chili*, vi. 324. 2.

Hab. Chili. (Coll. F. Smith.)

33. TACHYTES? GAYI.

Larra Gayi, *Spin. Gay's Chili*, vi. 324. 3.

Hab. Chili.

34. TACHYTES RUFITARSIS.

Larra rufitarsis, *Spin. Gay's Chili*, vi. 323. 1.

Hab. Chili.

Sect. 2. *Abdomen black.*

35. TACHYTES APIFORMIS. B.M.

Female. Length 7 lines.—Black: the head and thorax clothed with short pale ochraceous pubescence; that on the face is dense

and silvery; tips of the mandibles rufo-piceous, the apical joints of the palpi pale rufo-testaceous. Thorax opake, the scutellum shining and punctured; wings subhyaline, the fore-wings tinged with yellow, their anterior margins fuscous, the nervures ferruginous; the calcaria, the spines which arm the tibiæ and tarsi, and the claw-joint of the latter, rufo-testaceous; the legs have a thin pale pubescence, most dense on the anterior femora; they have also in parts a pale golden lustre, most bright on the posterior tibiæ outside. Abdomen subovate, fuscous-black, the apical margins of the segments rufo-piceous and covered with fine golden pile, the apical segment with bright golden pubescence, beneath smooth and shining; the margins of the segments rufo-piceous.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

36. TACHYTES BELLA.

Tachytes bella, *St. Farg. Hym.* iii. 248. 10.

Hab. Brazil.

37. TACHYTES JUCUNDUS. B.M.

Female. Length 8 lines.—Black: the face and cheeks clothed with golden pubescence; the clypeus with large shallow punctures on each side, the anterior margin with a minute notch in the middle; the mandibles yellow towards their apex, the tips black, the palpi pale testaceous. Thorax: the margins of the mesothorax covered with bright golden pubescence; the sides of the thorax and the metathorax have a changeable bright golden pubescence; the disk of the thorax and the scutellum closely and finely punctured, interspersed with larger punctures; the wings flavo-hyaline, their apical margins faintly clouded, the nervures pale testaceous; the legs have a changeable golden lustre, that on the posterior tibiæ outside, very brilliant; the calcaria, spines and claws ferruginous. Abdomen covered with thin cinereous pile, the apical margins of the segments with pale golden fasciæ, the apical segment covered above with fusco-ferruginous pubescence; the sides carinate; beneath, smooth and shining, with scattered punctures; the apical margins of the segments rufo-piceous.

Hab. Brazil (Villa Nova).

38. TACHYTES PLUTO.

Female. Length 8 lines.—Deep black: the face shining, the sides covered with silvery pubescence; the anterior margin of the

clypeus with a transverse rugose furrow; the mandibles ferruginous a little beyond the middle, the tips black. The mesothorax smooth and slightly shining; the metathorax transversely rugose; wings black, slightly iridescent; the legs shining, the tibiæ with a cinereous pile within. Abdomen subelongate, pointed at the apex, the apical margins of the first and three following segments with fasciæ of silvery-white pubescence; the apical segment carinated at the sides and rather strongly punctured.

Hab. Brazil. (Coll. F. Smith.)

39. TACHYTES 3-CINCTUS.

Liris tricincta, *Fabr. Syst. Piez.* 229. 5?
Tachytes 3-cincta, *Dahlb. Hym. Europ.* i. 125.

Hab. Island of St. Thomas.

40. TACHYTES LABIATUS.

Sphex labiata, *Fabr. Ent. Syst.* ii. 211. 52.
Pompilus labiatus, *Fabr. Ent. Syst. Supp.* p. 247. 9; *Syst. Piez.* p. 191. 16.
Tachytes murina, *Dahlb. Hym. Europ.* i. 132 & type sp. in Mus. Kiel.

Hab. South America.

Species of North America.

Abdomen black.

41. TACHYTES AURULENTUS. B.M.

Larra aurulenta, *Fabr. Syst. Piez.* 220. 7.
Say, Bost. Journ. i. 371. 3.

Hab. North America.

42. TACHYTES DIVES.

Tachytes dives, *St. Farg. Hym.* iii. 247. 8.

Hab. Carolina.

43. TACHYTES ARGENTIPES.

Female. Length 7 lines.—Black: the face, cheeks and mandibles at their base covered with silvery pubescence; the mandibles rufo-piceous; the vertex and thorax thinly covered with long pale pubescence; the lateral and posterior margins of the mesothorax, the post-scutellum, and a spot on the posterior

margins of the metathorax touching the coxæ, silvery pubescent; the wings hyaline and iridescent, the nervures black; the mesothorax and scutellum subopake, very closely punctured; the metathorax finely shagreened, and having behind a longitudinal furrow terminating at the verge of the truncation in a shallow shining fovea; the tibiæ and base of the tarsi covered with a glittering bright silvery pubescence. Abdomen black, with a violet iridescence; the apical margins of the four basal segments have bands of silvery pubescence; the apical segment with the margins carinated, above clothed with fusco-ferruginous pubescence.

Hab. St. Vincents. (Coll. F. Smith.)

44. TACHYTES DISTINCTUS. B.M.

Female. Length 9 lines.—Black: the face densely clothed with bright golden pubescence; the mandibles rufo-piceous, palest at their base. The thorax thinly covered with long pale yellow pubescence; the posterior margin of the prothorax, the lateral and posterior margins of the mesothorax, the tubercles and sides of the metathorax densely covered with golden pubescence; the wings yellow-hyaline, the apical margins slightly fuscous, the nervures ferruginous; the tibiæ, tarsi, and tips of the femora, pale ferruginous. Abdomen: the apical margins of the three basal segments with bands of silvery pubescence.

Var. β. The femora ferruginous.

Hab. North America; Georgia; Philadelphia.

The species described by Fabricius under the name *Larra aurulenta* I consider to be a closely allied species, differing in being smaller,—usually about 6¼ lines; it differs also in having a minute notch in the middle of the anterior margin of the clypeus, and also in having a longitudinal groove extending from the base to the apex of the metathorax. This species is described by St. Fargeau as the *T. aurulenta* of Fabricius.

45. TACHYTES TRILOBUS.

Lyroda triloba, *Say, Bost. Journ.* i. 372. 4.

Hab. North America (Indiana).

46. TACHYTES SUBITUS.

Lyroda subita, *Say, Bost. Journ.* i. 372. 5.

Hab. North America (Indiana).

47. TACHYTES PEPTICUS.

Lyrops peptica, *Say, Bost. Journ.* i. 371. 2.

Hab. North America (Indiana).

Genus 5. GASTROSERICUS.

Gastrosericus, *Spin. Ann. Soc. Ent. Fr.* vii. 480 (1838).

This genus was established by Spinola for the reception of a single specimen of a male insect closely resembling a *Tachytes*, but differing in having only two complete submarginal cells. There are also figures of three other examples in the plates to Savigny's *Egypt*, tab. 12. figs. 17, 18, 19. All the species known are from Egypt.

1. GASTROSERICUS WALTLII.

Gastrosericus Waltlii, *Spin. Ann. Soc. Ent. Fr.* vii. 481 ♂.
Dahlb. Hym. Europ. i. 467. 1.

Hab. Egypt.

2. GASTROSERICUS DREWSENI.

Gastrosericus Drewseni, *Dahlb. Hym. Europ.* i. 467. 2 ♀.

Hab. Egypt.

Genus 6. ASTATA.

Sphex, pt., *Schrank, Ins. Austr.* 384 (1781).
Astata, *Latr. Précis Car. Ins.* (1796).
Tiphia, *Panz. Faun. Germ.* fasc. 53 (1795–1805).
Larra, *Donov. Brit. Ins.* xii. 73.
Dimorpha, *Jurine, Hym.* 140 (1807).

1. ASTATA BOOPS. B.M.

Sphex boops, *Schrank, Enum. Ins. Austr.* 384. 777.
Vill. Ent. iii. 249. 82.
Gmelin, i. 2734. 89.
Rossi, Faun. Etrus. i. 128. 284.
Tiphia abdominalis, *Panz. Faun. Germ.* 53. 5.
Larra pompiliformis, *Donov. Brit. Ins.* xii. 73. t. 420.
Astata abdominalis, *Latr. Hist. Nat.* xiii. 297. 1; *Nouv. Dict.* ed. 2. iii. 25.
St. Farg. Encycl. Méth. x. 144.

Astata boops, *Spin. Ins. Lig.* i. 72. 1.
Van d. Lind, Obs. ii. 27. 1.
Shuck. Foss. Hym. p. 97. 1.
Dahlb. Hym. Europ. i. 140. 72.
St. Farg. Hym. iii. 256. 1.
Guér. Icon. Règ. An. iii. 441. t. 71. f. 1.
Lucas, Explo. Sc. Algér. iii. 260. t. 12. f. 7.
Wesm. Hym. Foss. Belg. p. 73.
Astata victor, *Curtis, Brit. Ent.* vi. t. 261.
Astata Vanderlindenii, *Robert, Mag. Zool.* (*Guér.*) t. 76 (1843).

Hab. Britain; France; Italy; Germany; Austria; Sweden.

2. ASTATA STIGMA. B.M.

Dimorpha stigma, *Panz. Faun. Germ.* 107. 13.
Astata stigma, *Van d. Lind, Obs.* ii. 29. 4.
Dahlb. Hym. Europ. i. 139. 69.
Larra pinguis, *Zett. Ins. Lapp.* 436. 1.
Dahlb. Exercit. Hym. 50. 2.
Astata jaculator, *Smith, Zool.* iv. 1157.

Hab. Britain; Germany; France; Sweden; Norway; Lapland.

3. ASTATA OCULATA.

Dimorpha oculata, *Jurine, Hym.* 146. t. 9.
Astata oculata, *Van d. Lind, Obs.* ii. 28. 2.
Dahlb. Hym. Europ. i. 140. 72.

Hab. Europe.

4. ASTATA AFFINIS.

Astata affinis, *Van d. Lind, Obs.* ii. 28. 3 ♂.
Dahlb. Hym. Europ. i. 142. 74.

Hab. Spain.

5. ASTATA CHILENSIS.

Astata Chilensis, *Sauss. Mém. Soc. Phys. Genève*, xiv. 23. 12.

Hab. Chili. (Coll. F. Smith.)

6. ASTATA SPINOLÆ.

Astata abdominalis, *Spin. Faun. Chil. Zool.* vi. 321. 1 (nec *Latr.*).
Astata Spinolæ, *Sauss. Mém. Soc. Phys. Genève*, xiv. 22. 11.

Hab. Chili.

7. ASTATA INTERMEDIA.

Astata intermedia, *Dahlb. Hym. Europ.* i. 140. 71.

Hab. Germany.

8. ASTATA VANDERLINDENII.

Astata Vanderlindenii, *Robert, Mag. Zool.* (1833) t. 268.

Hab. Spain.

9. ASTATA HISTRIO.

Astata histrio, *St. Farg. Hym.* iii. 257. 2 ♀.
Lucas, Explo. Sc. Algér. iii. 260.

Hab. Algeria.

10. ASTATA NIGRA.

Astata unicolor, *St. Farg. Hym.* iii. 258. 3 (1845) (nec *Say*).
Lucas, Explo. Sc. Algér. iii. 261 ♂.

Hab. Algeria.

11. ASTATA UNICOLOR. Pl. VIII. fig. 1. B.M.

Astata unicolor, *Say, Exped. St. Peter's River* (*Keating*) (1823).

Hab. North America (Missouri).

12. ASTATA RUFITARSIS.

Male. Length 4 lines.—Black: the head, thorax, and base of the abdomen thinly clothed with long silvery-white pubescence; the mandibles, tarsi, and apex of the abdomen ferruginous; the pro- and mesothorax strongly punctured; the scutellum punctured at the sides, smooth and shining in the middle; the metathorax finely reticulated; the wings have a slight fuscous cloud which extends to the apex of the marginal cell, beyond which they are clear hyaline; the inferior wings hyaline; the nervures black.

Hab. Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

13. ASTATA AUSTRALASIÆ.

Astata Australasiæ, *Shuck. Trans. Ent. Soc.* ii. 72. 1.

Hab. New Holland. (Coll. F. Smith.)

14. ASTATA ORIENTALIS.

Male. Length 4 lines.—Black: the head and thorax covered with a thin silvery pubescence; the mesothorax and scutellum punctured, the latter smooth and shining in the middle; on the

mesothorax in front are four slightly raised smooth carinæ which terminate before the middle; the two lateral carinæ elevated at their extremity, forming minute tubercles; the wings flavo-hyaline, their apical margins clear, the nervures ferruginous. The margins of the segments of the abdomen depressed, the first, second and basal half of the third red; the extreme base of the abdomen red.

Hab. India. (Coll. W. W. Saunders, Esq.)

Genus 7. MISCOPHUS.

Larra, pt., *Panz. Faun. Germ.* fasc. 106.
Miscophus, *Jurine, Hym.* 206.

The species of this genus being of rare occurrence, and the male of the type, *M. bicolor*, varying from black and red to a totally black insect, it is most probable that one or more of the following species are only varieties of the type.

1. MISCOPHUS BICOLOR. B.M.

Miscophus bicolor, *Jurine, Hym.* 206. t. 11. gen. 25 ♀.
Latr. Gen. Crust. et Ins. iv. 72.
Guér. Dict. Class. Hist. Nat. x. 632.
Van d. Lind, Obs. ii. 25. 1.
Shuck. Foss. Hym. 92. 1.
Dahlb. Hym. Europ. 235. 135.
Smith, Zool. ii. 697 ♂ ♀.
St. Farg. Hym. iii. 237. 1. t. 27. f. 6 ♀.
Steph. Illustr. Mand. Supp. vii. 12. t. 42. f. 3 ♀.
Wesm. Hym. Foss. Belg. 72. 1.
Larra dubia, *Panz. Faun. Germ.* 106. 14 ♀.

Hab. Britain; France; Germany; Belgium; Scandinavia; Sweden.

2. MISCOPHUS CONCOLOR.

Miscophus concolor, *Dahlb. Hym. Europ.* i. 236. 137 ♂ ♀.
Wesm. Hym. Foss. Belg. 72. 2.

Hab. Scandinavia; Germany (Berlin); Belgium (Brussels).

3. MISCOPHUS NIGER.

Miscophus niger, *Dahlb. Hym. Europ.* i. 236. 136 ♂ ♀.

Hab. Germany; Gothland.

4. MISCOPHUS SPURIUS.

Larra spuria, *Dahlb. Exercit. Hym.* 56. 7.
Miscophus spurius, *Dahlb. Hym. Europ.* i. 237. 138 ♂ ♀.
Hab. Germany; Finland.

Genus 8. SOLIERELLA.

Solierella, *Spin. Gay's Chili*, vi. 349.

Antennæ inserted in the middle of the face. Venter convex. The anterior tarsi spinose in both sexes. The superior wings with one marginal and three submarginal cells, the second submarginal cell petiolated and receiving the two recurrent nervures.

1. SOLIERELLA MISCOPHOIDES. Pl. VIII. fig. 2.

Solierella miscophoides, *Spin. Gay's Chili*, vi. 352. 1, *Atlas, Hym.* 2. f. 5.

Hab. Chili.

Genus 9. DINETUS.

Crabro, pt., *Fabr. Ent. Syst.* ii. 293 (1793).
Sphex, pt., *Fabr. Ent. Syst.* ii. 198 (1793).
Pompilus, pt., *Fabr. Syst. Piez.* 187 (1804).
Larra, pt., *Latr. Hist. Nat. Ins.* xiii. 296 (1805).
Dinetus, *Jurine, Hym.* 209 (1808).

1. DINETUS PICTUS.

Crabro pictus, *Fabr. Ent. Syst.* ii. 229. 20 ♂.
Panz. Faun. Germ. 17. 19 ♂. 72. 10 ♀.
Sphex gutta, *Fabr. Ent. Syst.* ii. 215. 72 ♀.
Crabro ceraunius, *Rossi, Faun. Etrus. Mant.* ii. *App.* 123. iii. ♀.
Pompilus guttatus, *Fabr. Ent. Syst. Supp.* 252. 34; *Syst. Piez.* 196. 44.
Larra picta, *Latr. Hist. Nat.* xiii. 296 ♂.
Spin. Ins. Lig. i. 73. 4.
Dinetus pictus, *Jurine, Hym.* 209. t. 11. gen. 26 ♀.
Panz. Krit. Revis. ii. 193.
Latr. Gen. Crust. et Ins. 73.
Guér. Dict. Class. Hist. Nat. ix. 496.
Van d. Lind, Obs. ii. 26. 1.
Shuck. Foss. Hym. 94. 1.
Dahlb. Hym. Europ. i. 232. 134 & 467.
St. Farg. Hym. iii. 234. 1. t. 27. f. 5 ♂.
Guér. Icon. Règ. Anim. t. 70. f. 10.

Dinetus pictus, *Steph. Illustr.* vii. *Supp.* 12. t. 42. f. 3.
Wesm. Hym. Foss. Belg. 73. 1.

Hab. Britain; France; Italy; Germany; Belgium; Austria.

Genus 10. PISON.

Alyson, pt., *Spin. Ins. Lig.* ii. 253 (1806–8).
Pison, pt., *Spin. Ins. Lig.* ii. 256.
Tachybulus, *Latr. Gen. Crust. et Ins.* iv. 75 (1809).
Nephridia, *Brullé, Trans. Ent. Soc. Fr.* ii. 75 (1833).

1. PISON ATER.

Alyson ater, *Spin. Ins. Lig.* ii. fasc. 4. 253. t. 3. f. 12 ♂.
Pison Jurinii, *Spin. Ins. Lig.* ii. 256.
St. Farg. et Serv. Ency. Méth. x. 143. 1.
Van d. Lind, Obs. ii. 39. 1.
St. Farg. Hym. iii. 230. 1.
Tachybulus niger, *Latr. Gen. Crust. et Ins.* iv. 75.
Pison ater, *Shuck. Trans. Ent. Soc.* ii. 75. 1.

Hab. Italy; France.

2. PISON PUNCTIFRONS. B.M.

Pison punctifrons, *Shuck. Trans. Ent. Soc.* ii. 77. 5 ♀.

Hab. India or St. Helena.

3. PISON RUGOSUS.

Female. Length 4 lines.—Black: clothed with silvery pubescence, especially the face, cheeks, legs, and apical margins of the segments of the abdomen; the sides of the thorax and metathorax, and also the base of the abdomen, with long glittering silvery-white pubescence; the head, mesothorax and scutellum coarsely punctured; the base of the metathorax coarsely obliquely striated, with a central deep longitudinal channel which is transversely striated as well as the truncated portion; the sides of the thorax and the pectus strongly punctured; the wings hyaline, the nervures testaceous; the first recurrent nervure received towards the apex of the first submarginal cell, and the second recurrent nervure received about the middle of the second submarginal cell. Abdomen shining, the basal segment with strong scattered punctures, the following segments much more finely punctured, and most densely so towards the apex.

Hab. India. (Coll. W. W. Saunders, Esq.)

This species belongs to Shuckard's subgenus (*Pisonitus*).

4. PISON REGALIS. Pl. VIII. fig. 3. B.M.

Pison regalis, *Smith, Trans. Ent. Soc.* New Ser. ii. 34. t. 8. f. 9 ♀.

Hab. North China (Ning-po-foo).

5. PISON XANTHOPUS. B.M.

Nephridia xanthopus, *Brullé, Ann. Soc. Ent. Fr.* ii. 403.
Pison xanthopus, *Shuck. Trans. Ent. Soc.* ii. 75. 2.
Pison obscurus, *Shuck. Trans. Ent. Soc.* ii. 75. 3 (var.).

Hab. Cape of Good Hope.

6. PISON AURATUS.

Pison auratus, *Shuck. Trans. Ent. Soc.* ii. 78. 4 ♀.

Hab. Cape of Good Hope. (Type in Coll. F. Smith.)

7. PISON ARGENTATUS. B.M.

Pison (Pisonitus) argentatus, *Shuck. Trans. Ent. Soc.* ii. 79. 9 ♀.

Hab. The Mauritius.

8. PISON MARGINATUS. B.M.

Female. Length 5 lines.—Black: the head opake, the face with silvery pubescence. The mesothorax and scutellum slightly shining, closely punctured; the metathorax obliquely rugose, the central channel without a carina, the truncation transversely rugose; the wings subhyaline, darkest towards their apical margins; the nervures testaceous, the outer margin of the tegulæ pale, the costal nervure fuscous; the two recurrent nervures uniting with the nervures of the petiolated second submarginal cell. Abdomen thinly covered with cinereous pubescence, very finely punctured, the apical margins of the segments pale testaceous.

Hab. Australia (Hunter River).

9. PISON PERPLEXUS. B.M.

Male. Length 5½ lines.—Black: the face thinly covered with silvery pubescence; the mesothorax and scutellum very closely and finely punctured; the metathorax rugose, indistinctly obliquely so, the central channel with a carina which terminates a little before the verge of the truncation, the latter transversely coarsely sulcate, and having a central deeply impressed line; the wings hyaline, their apical margins with a fuscous border; the nervures testaceous, the costal nervure fuscous, the two recurrent nervures received by the second submarginal cell distinctly within.

Abdomen closely punctured, the apical margins of the segments with uninterrupted silvery fasciæ.

Hab. Australia.

This species resembles the *P. Westwoodii*, but differs in having a carina in the channel of the metathorax, and in the sculpture; the neuration of the wings appears to be the same.

10. PISON VESTITUS. B.M.

Female. Length 5½ lines.—Black: the face covered with silvery pubescence, intermixed on the elypeus with longer fuscous hairs; the posterior margin of the prothorax covered with golden pubescence; the meso- and metathorax without pubescence, the latter in fresh examples would probably have a covering of pale pubescence; the mesothorax closely punctured, the scutellum less closely so; the metathorax shining and finely punctured, with a slightly impressed channel, in which is a carina that extends to the verge of the truncation; the latter transversely sulcate, and having a deep depression above; wings fuscous, the two recurrent nervures uniting with the nervures of the petiolated second submarginal cell; legs simple, without spines or cilia. Abdomen shining, the apical margins of the segments with fasciæ of golden pubescence.

Hab. Australia.

11. PISON SPINOLÆ. B.M.

Pison Spinolæ, *Shuck. Trans. Ent. Soc.* ii. 76. 4 ♀.
Pison Australis, *Sauss. Mém. Soc. Phys. Genève*, xiv. 11. t. f. 2 ♀?

Hab. Sydney; Van Diemen's Land. (Type in Coll. F. Smith.)

P. Australis is said to differ from *P. Spinolæ* in being smaller, in wanting the carinæ on the mandibles, and in having horizontal striæ on the metathorax, instead of oblique ones as in *P. Spinolæ*. On examining the typical specimen of *P. Spinolæ* and referring to the description, it is found that the carina is not on the external face of the mandible, but on the upper surface, so that when the mandibles are closed, it is not visible. The size of the species varies greatly; the metathorax of the typical specimen is only obliquely striated at the base; on the truncation, or posterior part, it is transverse.

12. PISON (PISONITUS) RUFICORNIS. B.M.

Female. Length 3 lines.—Black: the face densely covered with silvery pubescence which has a faint golden tinge; the

palpi, mandibles and antennæ ferruginous, the tip of the latter fuscous. The mesothorax and scutellum very closely and delicately punctured; the metathorax obliquely and coarsely striated, having a central longitudinal channel and an abbreviated carina at the base; the truncation coarsely rugose, with a deep central longitudinal furrow; the wings hyaline and iridescent, the nervures testaceous, the stigma fuscous, the tegulæ pale testaceous; the legs ferruginous, the coxæ and femora dusky. Abdomen: the basal margin of the second segment depressed; the apical margin of the first segment narrowly, that of the second more broadly, and the four apical segments rufo-testaceous.

Hab. Australia (MacIntyre River).

13. PISON WESTWOODII. B.M.

Pison Westwoodii, *Shuck. Trans. Ent. Soc.* ii. 77. 6 ♀.

Hab. Van Diemen's Land.

14. PISON TASMANICUS.

Male. Length 4¼–5 lines.—Black: the head and thorax subopake; the face covered with silvery pubescence; the head, thorax and legs with a long thinly scattered griseous pubescence; the metathorax obliquely striated, the carina which usually runs down the central channel obsolete; wings fusco-hyaline, the apical margins of the wings with a fuscous border; the first recurrent nervure entering the first submarginal cell at its extreme apex, the second received by the third submarginal cell at its extreme base; the intermediate and posterior tibiæ with a few short scattered spines; the apical margins of the segments of the abdomen with fasciæ of silvery pubescence.

Hab. Van Diemen's Land.

Very probably the male of *P. Spinolæ*.

15. PISON OBLIQUUS.

Female. Length 4 lines.—Black: the head and thorax opake, the face covered with silvery pubescence; the metathorax obliquely striated, the central channel nearly obsolete, shallow, and with the striæ crossing the depression; the truncation transversely striated; the wings subhyaline, their apical margins with a fuscous cloud; the apical margins of the segments with indistinct bands of silvery pile; probably, in fine examples, the bands are distinct.

Hab. Van Diemen's Land. (Coll. W. W. Saunders, Esq.)

The neuration of the wings is the same as that of *P. Spinolæ*.

16. PISON RUFIPES.

Pison (Pisonitus) rufipes, *Shuck. Trans. Ent. Soc.* ii. 79. 8 ♀.

Hab. Van Diemen's Land. (Type in Coll. F. Smith.)

17. PISON MOROSUS. B.M.

Pison morosus, *White, Voy. Erebus and Terror.*

Female. Length 4 lines.—Jet-black: the face with a little silvery pubescence, the head opake. The mesothorax very delicately and closely punctured; an abbreviated shining raised line on each side over the tegulæ; the metathorax obliquely strigose, the central channel slightly impressed, the striæ uniting and crossing it; the truncation transversely rugose, its margin slightly rounded; the wings hyaline, their apical margins slightly fuscous, the two recurrent nervures uniting with the nervures of the petiolated submarginal cell. Abdomen smooth and shining, the margins of the segments slightly depressed.

Hab. New Zealand.

18. PISON PARAENSIS.

Pison Paraensis, *Spin. Mem. Accad. Torino*, xiii. 58. 40 (1853).

Hab. Brazil (Para).

19. PISON CHILENSIS.

Pison Chilensis, *Spin. Gay's Chili*, vi. 326. 1.

Hab. Chili.

20. PISON AREOLATUS.

Pison areolatus, *Spin. Gay's Chili*, vi. 327. 2.

Hab. Chili.

21. PISON LÆVIS. B.M.

Female. Length 3½ lines.—Head opake, the face covered with silvery pubescence; the metathorax smooth and shining, with a few scattered punctures at the sides, the central channel without a carina; a deep elongate-ovate fossula in the middle of the truncation, the margins of the latter rounded; the wings slightly fuscous, the nervures black; the two recurrent nervures uniting with the nervures of the petiolated submarginal cell. Abdomen smooth and shining, very delicately punctured, the margins of the segments slightly depressed.

Hab. Georgia.

Fam. 5. BEMBICIDÆ.

The labrum produced into a beak.

Bembicites, *Latr. Hist. Nat. Ins.* (1802).
Bembecinæ, *Fallen, Nov. Hym. Disp. Meth.* (1813).
Bembicides, *Latr. Gen. Crust. et Ins.* iv. (1807).
Bembicites, *Newm. Ent. Mag.* ii. (1834).
Bembicidæ, *Westw. Introd. Class. Ins.* (*Synop.*) (1840).

Genus 1. BEMBEX.

Apis, pt., *Linn. Syst. Nat.* i. 957 (1766).
Bembyx, pt., *Fabr. Syst. Ent.* 361 (1775).
Bembex, pt., *Fabr. Mant.* 285 (1787).
Vespa, pt., *Gmelin*, 2768. 153 (1789).

1. BEMBEX ROSTRATA. B.M.

Apis rostratra, *Linn. Faun. Suec.* No. 1700; *Syst. Nat.* i. 957. 25. *Vill. Ent.* iii. 294. 21.
Bembex rostrata, *Fabr. Syst. Ent.* 362. 3; *Ent. Syst.* ii. 248. 3; *Syst. Piez.* 223. 5.
Panz. Faun. Germ. i. 10; *Krit. Revis.* ii. 132.
Latr. Hist. Nat. Crust. et Ins. xiii. 300. 1; *Gen. Crust. et Ins.* iv. 98.
Oliv. Encycl. Méth. iv. 29. 3.
Duméril, Dict. Sc. Nat. iv. 297; *Icon. Entom. et Consid.* i. t. 30. f. 10.
Guér. Icon. R. Anim. Ins. iii. 438. t. 70. f. 7.
Van d. Lind, Obs. Hym. Europ. ii. 9. 1.
Dahlb. Hym. Europ. i. 173. 107.
St. Farg. Hym. iii. 260. 1.
Lucas, Explo. Sc. Algér. iii. 263.
Wesm. Hym. Foss. Belg. p. 74.
Vespa (Bembex) rostrata, *Gmel.* 2768. 153.
Vespa armata, *Sulzer, Hist. Ins.* t. 27. f. 10.
Reaum. Gen. t. 27. f. 10.
Christ. Hym. p. 220. t. 29. f. 2 ♂.

Hab. Italy; France; Germany; Austria; Sweden; Finland; Algeria.

2. BEMBEX OLIVACEA. B.M.

Bembex olivacea, *Fabr. Mant. Ins.* i. 285. 4 ♂.
Rossi, Faun. Etrus. ii. 81. 858 ♂ ♀.
Latr. Gen. Crust. et Ins. iv. 99.
Van d. Lind, Obs. ii. 13. 7.

Bembex olivacea, *Dahlb. Hym. Europ.* i. 178. 113.
Brullé, Hist. Nat. Il. Canar. iii. 90. 46.
St. Farg. Hym. iii. 268. 6.
Lucas, Explo. Sc. Algér. iii. 263.
Bembex glauca, *Fabr. Mant. Ins.* i. 285. 5 ♀; *Ent. Syst.* ii. 249. 5; *Syst. Piez.* 224. 8.
Spin. Ins. Lig. ii. 174. 3.
Oliv. Encycl. Méth. iv. 291. 6.
St. Farg. Hym. iii. 270. 7.
Lucas, Explo. Sc. Algér. iii. 263.
Bembex olivata, *Dahlb. Hym. Europ.* i. 490 (var.).

Hab. France; Italy; Germany; Spain; Portugal; Algeria; Tranquebar.

3. BEMBEX OCULATA. B.M.

Bembex oculata, *Jurine, Hym.* 175. t. 10. gen. 16 ♂.
Panz. Faun. Germ. 84. 22; *Krit. Revis.* ii. 132.
Spin. Ins. Lig. ii. 173.
Van d. Lind, Obs. ii. 13. 6.
Dahlb. Hym. Europ. i. 178. 112.
Lucas, Explo. Sc. Algér. iii. 262.

Hab. France; Germany; Italy.

4. BEMBEX REPANDA. B.M.

Bembex repanda, *Latr. Gen. Crust. et Ins.* iv. 98. 3.
Van d. Lind, Obs. ii. 10. 3.
Dahlb. Hym. Europ. i. 177. 109.
Lucas, Explo. Sc. Algér. iii. 263.
Bembex Latreillii, *St. Farg. Hym.* iii. 266. 5.

Hab. France.

5. BEMBEX LABIATA.

Bembex labiata, *Fabr. Ent. Syst. Supp.* 259. 5; *Syst. Piez.* 224. 9.
Coqueb. Illustr. dec. ii. 61. t. 15. f. 1.
Van d. Lind, Obs. ii. 14. 8.
Dahlb. Hym. Europ. i. 179. 114.

Hab. France.

6. BEMBEX BIDENTATA. B.M.

Bembex bidentata, *Van d. Lind, Obs.* ii. 11. 5.
Dahlb. Hym. Europ. i. 178. 111.
St. Farg. Hym. iii. 269. 2.

Hab. France; Italy.

7. BEMBEX TARSATA. B.M.

Bembex tarsata, *Latr. Gen. Crust. et Ins.* iv. 98. 2.
Van d. Lind, Obs. ii. 10. 2.
Dahlb. Hym. Europ. i. 176. 108.
St. Farg. Hym. Europ. iii. 265. 4.

Hab. South of France; Paris; Turin.

8. BEMBEX SINUATA. B.M.

Bembex sinuata, *Panz. Faun. Germ.* 86. 13; *Krit. Revis.* p. 132.
Latr. Gen. Crust. et Ins. iv. 98. 4.
Van d. Lind, Obs. ii. 10. 4.
Dahlb. Hym. Europ. i. 117. 110.

Hab. Germany; France.

9. BEMBEX DISSECTA.

Bembex dissecta, *Dahlb. Hym. Europ.* i. 487. 6.

Hab. South of Europe.

10. BEMBEX WILDEI.

Bembex Wildei, *Dahlb. Hym. Europ.* i. 491. 25.

Hab. Central Europe.

11. BEMBEX UNDATA.

Bembex undata, *Dahlb. Hym. Europ.* i. 487. 7.

Hab. Central Europe.

12. BEMBEX VIDUA.

Bembex vidua, *St. Farg. Hym. Europ.* i. 264. 3.

Hab. Lombardy.

13. BEMBEX MEGERLEI.

Bembex Megerlei, *Dahlb. Hym. Europ.* i. 492. 34.

Hab. Austria.

14. BEMBEX NEGLECTA.

Bembex neglecta, *Dahlb. Hym. Europ.* i. 489. 12.

Hab. Austria.

15. BEMBEX MELÆNA. B.M.

Male. Length 7 lines.—Black: the scape in front, the ante-

rior half of the clypeus, a line on the inner orbit of the eyes, the labrum and mandibles, white; the tips of the mandibles ferruginous; the head, thorax and base of the abdomen have a thin griseous pubescence; beneath, the hinder margin of the metathorax sometimes with a yellow spot; the coxæ, trochanters and femora black; the tips of the latter, the tibiæ and tarsi, pale yellow; the intermediate femora serrated beneath; the tibiæ have a black stripe behind; the wings hyaline, the nervures and hinder margin of the tegulæ ferruginous. Abdomen black: the second segment with a large compressed curved tooth beneath; the sixth segment with a small trigonate tubercle in the middle.

Var. β. The basal segment with a narrow line on each side, and the two following segments with a curved stripe on each side.

Hab. Albania.

16. BEMBEX ROSSII.

Bembex Rossii, *Dahlb. Hym. Europ.* i. 492. 31.

Hab. Spain.

17. BEMBEX NOTATA.

Bembex notata, *Dahlb. Hym. Europ.* i. 491. 28.

Hab. Rhodes.

18. BEMBEX TURCA.

Bembex turca, *Dahlb. Hym. Europ.* i. 488. 11.

Hab. Rhodes.

19. BEMBEX BASALIS.

Bembex basalis, *Dahlb. Hym. Europ.* i. 490. 20.

Hab. Rhodes.

20. BEMBEX FLAVESCENS.

Male. Length 7 lines.—Head and thorax black; the labrum, clypeus, inner orbit of the eyes, the scape in front, and the mandibles, yellow; the tips of the mandibles ferruginous; the outer orbit of the eyes yellow; the flagellum fulvous beneath, and four or five of the apical joints subpectinate beneath. Thorax: a narrow line on the collar, two abbreviated ones on the mesothorax in front, a stripe over the tegulæ, a narrow line on the posterior margin of the scutellum and post-scutellum, a curved one on the metathorax, and its posterior angles, yellow; the sides of the thorax irregularly maculated with yellow; the legs yellow,

with a black spot on the trochanters and another at the extreme base of the femora beneath. Abdomen yellow, the extreme base black; a transverse black line in the middle of the posterior margin of the first segment, and two similar lines at the base of the three following segments; the second segment beneath black at its base, with a compressed curved acute tooth in the middle; the second segment has a narrow black line at its basal margin, and the two following a bilobed spot; an angular spot at the base of the sixth segment.

Hab. Teneriffe. (Coll. F. Smith.)

21. BEMBEX CHLOROTICA.

Bembex chlorotica, *Spin. Ann. Soc. Ent. Fr.* vii. 469. 21 (1838). *St. Farg. Hym.* iii. 276. 11.

Hab. Egypt.

22. BEMBEX SOROR.

Bembex soror, *Dahlb. Hym. Europ.* i. 489. 13.

Hab. Egypt.

23. BEMBEX LUSCA. B.M.

Bembex lusca, *Spin. Ann. Soc. Ent. Fr.* vii. 467. 20 (1838). *St. Farg. Hym.* iii. 274. 10.

Hab. Egypt.

24. BEMBEX WESTERMANNI.

Bembex Westermanni, *Spin. Ann. Soc. Ent. Fr.* vii. 470. 13 (1838).

Hab. Egypt.

25. BEMBEX PECTORALIS.

Bembex pectoralis, *Dahlb. Hym. Europ.* i. 489. 17.

Hab. Nubia.

26. BEMBEX FISCHERI.

Bembex Fischeri, *Spin. Ann. Soc. Ent. Fr.* vii. 470 (1838).

Hab. Africa.

27. BEMBEX CAPENSIS.

Bembex Capensis, *St. Farg. Hym.* iii. 273. 9.

Hab. Cape of Good Hope.

28. BEMBEX CARINATA. B.M.

Female. Length 7 lines.—Black: the clypeus, labrum, scape in front, and the mandibles, yellow; the orbits of the eyes rufo-testaceous; the vertex and cheeks have a long hoary pubescence. Thorax thinly clothed with hoary pubescence, which is most dense on the metathorax; the posterior margin of the scutellum and post-scutellum yellow, sometimes entirely black; the wings hyaline, the nervures pale ferruginous; the legs reddish-yellow, with coxæ, trochanters and base of the femora black; a black spot on the anterior and intermediate tibiæ beneath. Abdomen: the basal segment with a transverse yellow band attenuated in the middle; the following segments have a broad biarcuate band; beneath black; the three intermediate segments have an angular yellow spot at their lateral margins.

The male closely resembles the female, and only differs in having a central longitudinal carina on the second and sixth segments.

Hab. Cape of Good Hope.

29. BEMBEX FUSCIPENNIS.

Bembex fuscipennis, *St. Farg. Hym.* iii. 271. 8.

Hab. Cape of Good Hope. (Coll. F. Smith.)

30. BEMBEX TRICOLOR.

Bembex tricolor, *Dahlb. Hym. Europ.* i. 180.

Hab. Africa (Cape of Good Hope); Guinea.

31. BEMBEX VENATOR. B.M.

Female. Length 6 lines.—Black: the head and thorax covered with griseous pubescence; the clypeus, a transverse line above, the scape in front, two minute spots in front of the anterior stemma, the labrum and mandibles, yellow; the tips of the latter ferruginous; a bilobed black spot at the base of the clypeus; the flagellum fulvous beneath; the outer orbit of the eyes yellow; a yellow stripe on the tegulæ and another on each side of the thorax before the insertion of the wings; the femora yellow in front towards their apex; the tibiæ and tarsi yellow; the tibiæ have a black stripe outside; the wings hyaline, their nervures ferruginous. Abdomen: all the segments have a narrow biarcuate fascia, the first widely interrupted, the second slightly so, the following continuous; beneath, immaculate.

Hab. Cape of Good Hope.

32. Bembex undulata.

Bembex undulata, *Spin. Ann. Soc. Ent. Fr.* vii. 468 (1838). *Dahlb. Hym. Europ.* i. 487. 3.

Hab. Cape of Good Hope.

33. Bembex grisescens.

Bembex grisescens, *Dahlb. Hym. Europ.* i. 489. 16.

Hab. Port Natal.

34. Bembex intermedia.

Bembex intermedia, *Dahlb. Hym. Europ.* i. 491. 27.

Hab. Port Natal.

35. Bembex Natalis.

Bembex Natalis, *Dahlb. Hym. Europ.* i. 489. 14.

Hab. Port Natal.

36. Bembex flavifrons. B.M.

Female. Length 8–8½ lines.—Black: the face yellow, a black spot above the insertion of each antenna, and two spots at the base of the clypeus; the labrum and mandibles yellow, the latter black at their tips; the scape in front and the outer orbit of the eyes broadly yellow. The prothorax yellow; the sides of the mesothorax, two abbreviated lines in front, and a transverse spot at its posterior margin, yellow; a spot on each side of the scutelium, a line on the post-scutellum, and an arcuate stripe on the metathorax, yellow; the thorax beneath and the legs yellow; the knees black; the wings hyaline, the nervures testaceous. Abdomen: the basal segment has a biarcuate fascia, narrow in the middle and broadly expanded at the sides, yellow; the second segment has a broad yellow fascia at the base, its posterior margin biarcuate, with two black spots at the basal margin; the three following segments have a narrower biarcuate fascia in the middle; beneath, the two basal segments yellow, the second having a central longitudinal black stripe; the two following segments with a large angular macula on each side.

Var. α. The fascia on the basal segment interrupted; beneath, all the segments black at their base, with lateral yellow spots.

Hab. Australia.

37. BEMBEX FLAVIPES. B.M.

Female. Length 5 lines.—Head yellow, the face above the clypeus black; a transverse reddish-yellow line in front of the anterior stemma, which unites with one at the inner orbit of the eyes. Thorax black above and yellow beneath; the prothorax yellow; the mesothorax has a broad stripe on each side, two in the middle, and a transverse abbreviated stripe at its posterior margin; the posterior margin of the scutellum and the post-scutellum yellow; a curved bisinuated yellow stripe on the metathorax behind; the wings hyaline, the tegulæ yellow; a large spot on the breast, a small one on the coxæ and trochanters, and the extreme tips of the femora, black. Abdomen yellow beneath and black above; a bilobed yellow macula at the extreme base of the first segment; segments 1–5 with a glaucous-yellow band on each side, which is deeply sinuated on its anterior margin; the bands on the fifth segment united; the apical segment with a black line in the middle, the sides being ferruginous.

Hab. Australia.

38. BEMBEX PALMATA.

Male. Length 7½ lines.—Black: the clypeus, labrum, mandibles and scape yellow; the flagellum yellow beneath; the six basal joints of the flagellum gradually thickened, the seventh and following joints half the thickness of the sixth and serrated beneath; the inner orbit of the eyes with a broad yellow stripe which does not quite extend to the vertex, a yellow stripe in the middle of the face terminating at the anterior stemma. Thorax: the posterior margin of the prothorax, an epaulet over the tegulæ, and a spot on each side of the scutellum, yellow; beneath, a large irregular macula on the sides of the prothorax, a second on the sides of the pectus, and a third on each side of the metathorax, yellow; the legs yellow, the anterior tarsi broadly dilated; wings subhyaline, the nervures ferruginous. Abdomen: segments 1–5 have on each side a pale stripe, which is pointed within, the first and third being the narrowest; beneath, the second segment yellow, with a large stout raised central black carina, the posterior margin of the segment black; the three following segments have a yellow spot on each side.

Hab. Australia? (Coll. F. Smith.)

39. BEMBEX VARIABILIS. B.M.

Female. Length 5–5½ lines.—Black: the head with a griseous pubescence; the antennæ obscurely testaceous beneath; the scape yellow in front; the labrum, clypeus and mandibles yellow;

two black spots at the base of the clypeus, the tips of the mandibles ferruginous; a triangular spot at the base of the clypeus, an abbreviated line at the inner orbit of the eyes, and the outer orbit entirely yellow. Thorax thinly covered with griseous pubescence, most dense on the metathorax; a line on the collar, a spot on the tegulæ in front, a line at their inner margin, and a spot on each side of the scutellum, yellow; the coxæ and femora black, the latter yellow at their apex beneath; the tibiæ and tarsi yellow; the tibiæ and basal joint of the tarsi black behind, the anterior tarsi furnished with long cilia. Abdomen with the first segment clothed with long griseous pubescence; on the following segments it is very short, suberect and griseous; the first segment has a straight interrupted yellow band, segments 2–5 have an interrupted biarcuate yellow band.

Var. α. The basal half of the clypeus black.

Var. β. The antennæ pale testaceous beneath, the apical segment of the abdomen with two yellow spots.

Var. γ. Two abbreviated lines on the mesothorax, a transverse line in the middle of the posterior margin of the mesothorax, a curved line on the scutellum and post-scutellum, and the coxæ and trochanters spotted with yellow; the sides of the thorax with large yellow spots.

Hab. Australia (Hunter River; Port Essington; Swan River).

This species closely resembles *B. furcata*, but it is smaller and black behind, and the abdomen is covered with griseous pubescence. Var. γ. may possibly be a distinct species: a single specimen only has been received from Swan River.

40. BEMBEX RAPTOR. B.M.

Male. Length 6½ lines.—Black: the face covered with silvery-white pubescence; the anterior margin of the clypeus white; a line on the inner orbit of the eyes, three united spots in front of the anterior stemma; a spot between the antennæ and the scape in front, pale yellow; the outer orbit of the eyes yellow. The prothorax yellow, with an irregular-shaped black spot on each side, and a transverse oblong black spot above; the meso- and metathorax black; the former has two central short stripes in front, an epaulet over the tegulæ, the posterior margin of the scutellum and post-scutellum, yellow; a curved yellow macula on each side of the metathorax, and two oblong spots beneath the wings; the legs yellow, with the coxæ, trochanters and base of the femora black; also a black spot on the anterior and intermediate tibiæ beneath; the wings clear hyaline, the nervures black. Abdomen: all the segments have a borad glaucous-yellow band; that on the basal segment is notched in the middle

of its anterior margin; the four following have their anterior margins notched in the middle and sinuated on each side, their posterior margins straight, with a notch in the middle; the sixth and seventh segments yellow, the latter with a black line in the middle; beneath, the posterior margins of the segments have a yellow fascia which is attenuated in the middle.

Hab. Adelaide.

41. BEMBEX VESPIFORMIS. B.M.

Female. Length 8 lines.—Black: the face covered with silvery-white pubescence, that on the vertex griseous; the scape more or less yellow in front; the flagellum rufo-testaceous beneath; the anterior margin of the clypeus, the labrum, and mandibles at their base, yellow. Thorax: the scutellum and post-scutellum have a pale yellow dot on each side; the metathorax densely clothed with cinereous pubescence; wings subhyaline, the nervures black; the coxæ and femora black, the anterior femora in front and the intermediate and posterior pairs at their apex above, black; the tibiæ and tarsi yellow; the anterior and intermediate tibiæ have a black stripe outside, the posterior pair being black beneath; the basal joints of the anterior tarsi are black outside and furnished with long cilia. Abdomen: a large macula on each side of the basal segment, pointed within, and a small angular macula at the extreme lateral margins of the second segment, both of a pale yellowish-white; the apical segment and apical margin of the fifth segment in the middle, orange-yellow; beneath, entirely yellow.

Male.—Closely resembles the female, but with the scape entirely yellow; the second segment with an elevated carina which has its superior margin black; the apical segment black.

Hab. Adelaide.

42. BEMBEX ATRIFRONS. B.M.

Female. Length 7 lines.—Black: the labrum yellow, with the base, sides and apex more or less black; the outer orbit of the eyes, and a minute spot on the scape in front, yellow. Thorax: a narrow line on the posterior margins of the prothorax and scutellum yellow; a spot on the tegulæ, a line over them and the tubercles, yellow; the legs yellow, the coxæ, trochanters, and base of the femora black; a fusco-ferruginous stripe on the anterior and intermediate tibiæ above, and the anterior tarsi furnished with long ferruginous cilia; the wings hyaline, their nervures ferruginous. Abdomen: the basal segment has on each side a short narrow glaucous stripe, and the

three following segments a narrow biarcuate glaucous stripe, slightly interrupted in the middle; beneath, entirely black.

Hab. Australia (Swan River).

43. BEMBEX FURCATA. B.M.

Bembex furcata, *Erichs. Wiegm. Arch.* 1842, p. 266. 240.

Hab. Van Diemen's Land; Australia (Swan River).

Erichson describes the male as having the labrum black, and the clypeus with a yellow macula; a series of examples exhibits every variety, from yellow to black.

44. BEMBEX LUNATA.

Bembex lunata, *Fabr. Ent. Syst.* ii. 249. 6; *Syst. Piez.* 224. 10. *Dahlb. Hym. Europ.* i. 492. 33.

Hab. Tranquebar.

45. BEMBEX TREPANDA. B.M.

Bembex trepanda, *Dahlb. Hym. Europ.* i. 181.

Hab. India.

46. BEMBEX SULPHURESCENS. B.M.

Bembex sulphurescens, *Dahlb. Hym. Europ.* i. 180.

Hab. India (Madras; The Punjaub).

47. BEMBEX MELANCHOLICA. B.M.

Female. Length 8½ lines.—Head and thorax black; the clypeus, sides of the face, scape in front, labrum, mandibles and outer orbit of the eyes, livid-yellow; the clypeus has two black spots at the base. The posterior margin of the prothorax, a line on each side of the mesothorax, two stripes on the disk, and a transverse one at its posterior margin united to the central stripes, livid-yellow; a transverse curved stripe on the scutellum and post-scutellum, and also the metathorax, livid-yellow; an angular black spot on each side of the metathorax, from which a narrow black line runs obliquely inwards, meeting in the middle of the base; a narrow black line runs from the outer angle of the spot down the sides of the metathorax; the thorax livid-yellow beneath, with a black spot in the middle of the pectus, and one or two smaller ones at the sides; the legs livid-yellow, with a black stripe on the tibiæ and femora behind. Abdomen blue-black; segments 1–5 have a broad livid fascia, the first narrowed in the middle,

the posterior margins of the others biarcuate; the second and third have on each side a transverse black spot; the fourth and fifth have their anterior margins bisinuated; beneath, the posterior margin of the first segment, and a spot on each side of the following segments, livid-yellow; the abdomen covered above with short thin black pubescence.

The male only differs in having the middle of the basal margin of the first segment of the abdomen beneath, produced into an obtuse tubercle.

Hab. Sumatra.

48. BEMBEX CILIATA. B.M.

Bembex ciliata, *Fabr. Syst. Piez.* p. 226. 21.
Dahlb. Hym. Europ. i. 488. 11.
St. Farg. Hym. Europ. i. 279. 14.

Hab. Brazil (Para; Santarem; Tapajos).

49. BEMBEX GRATIOSA. B.M.

Female. Length 6 lines.—Head black; the inner orbit of the eyes, the clypeus, scape in front, labrum and mandibles, of a glaucous-yellow; tips of the mandibles ferruginous; the flagellum fulvous beneath and fuscous above, the basal joint black; a glaucous spot in front of the anterior stemma. Thorax black above and of a livid-yellow beneath; the prothorax, lateral margins of the mesothorax, two stripes on the disk dilated anteriorly and recurved posteriorly and united, the hinder margin of the scutellum, the post-scutellum, a curved stripe on the metathorax and its lateral angles, pale yellow; the legs yellow, in some examples with a narrow black line on the femora above; the wings clear hyaline, the nervures pale ferruginous. Abdomen pale yellow; the extreme base black, and a curved spot on the basal segment above; a broad black band on the basal margin of the second segment, which is suddenly narrowed at the sides; the apical margin has a narrow black band, which is widest and acute in the middle; the following segments are similarly banded, but the bands are narrower; the apical segment has a sharp tooth on each side, and the apex is deeply notched.

The male differs in having a transverse raised carina on the second segment of the abdomen beneath, which is terminated at each end by a minute acute tooth; the apical segment has a tooth on each side and a deep notch at the apex, as in the other sex.

Hab. Brazil (Tapajos).

50. BEMBEX PLACIDA.

Male. Length 5–6 lines.—Black: the scape in front, clypeus, labrum and mandibles, yellow; the base of the clypeus and orbits of the eyes pale testaceous; the face thinly covered with yellowish pubescence. Thorax: the posterior margin of the prothorax, the lateral margins of the mesothorax, two stripes on the disk, the hinder margin of the scutellum, the post-scutellum, a curved line on the metathorax, and its lateral angles, yellow; beneath, yellow; the pectus black; also a black stripe beneath the wings; a black spot on the trochanters beneath, another at the extreme base of the femora and tibiæ; a narrow black stripe at the apex of the femora above, and a line on the posterior tibiæ within; the claws ferruginous; the wings hyaline, the nervures black; a yellow spot on the tegulæ in front. Abdomen: the basal segment has a slightly interrupted yellow fascia, the second segment a broad interrupted fascia on each side enclosing a black dot; the three following segments have on each side a curved stripe; the sixth segment has a slightly interrupted straight fascia, the apical segment being yellow at its apex; beneath yellow, with a central row of black spots, the second segment having on each side at its base a small oblique black spot; the sixth segment with a minute acute spine in the centre.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

51. BEMBEX AMERICANA.

Bembex Americana, *Fabr. Ent. Syst.* ii. 250. 9; *Syst. Piez.* 225. 13. *Dahlb. Hym. Europ.* i. 183.

Hab. South America.

52. BEMBEX BRULLEI.

Bembex Brullei, *Guér. Voy. Coq. Zool.* pt. 2. p. 263, *Atlas*, t. 9. f. 3. *Spin. Gay's Chili*, vi. 318. 1.

Hab. Chili.

53. BEMBEX SULPHUREA.

Bembex sulphurea, *Spin. Gay's Chili*, vi. 319. 2.

Hab. Chili.

54. BEMBEX VENTRALIS.

Bembex ventralis, *Dahlb. Hym. Europ.* i. 180. *St. Farg. Hym.* iii. 278. 13.

Hab Chili; Valparaiso. (Coll. F. Smith.)

55. BEMBEX FASCIATA. B.M.

Bembex fasciata, *Fabr. Syst. Piez.* p. 224. 6.
Say, Bost. Journ. i. 367. 2.
Dahlb. Hym. Europ. i. 184.
Bembex Spinolæ, *St. Farg. Hym.* iii. 277. 12.

Hab. N. America (St. John's Bluff, East Florida).

56. BEMBEX LONGIROSTRA.

Bembex longirostra, *Say, Bost. Journ.* i. 366? 1.

Hab. Mexico.

57. BEMBEX MONODONTA. B.M.

Bembex monodonta, *Say, Narr. Exped. St. Peter's River, Append.* 69.

Hab. Pennsylvania.

58. BEMBEX INSCRIPTA.

Bembex inscripta, *Dahlb. Hym. Europ.* i. 183.

Hab. ——?

59. BEMBEX AFFINIS.

Bembex affinis, *Dahlb. Hym. Europ.* i. 182.

Hab. ——?

Genus 2. MONEDULA.

Vespa, pt., *Linn. Syst. Nat.* i. 574. ed. 10 (1758).
Apis, pt., *De Geer, Ins.* iii. 507 (1773).
Bembex, pt., *Fabr. Ent. Syst.* ii. 247 (1793).
Monedula, *Latr. Gen. Crust. et Ins.* iv. 99 (1809).
Stictia, *Illig. ed. Rossi, Faun. Etrus.* (1807).

1. MONEDULA SIGNATA. B.M.

Vespa signata, *Linn. Syst. Nat.* i. 574. 14. ed. 10 (1758); *Syst. Nat.* i. 952. 24. ed. 12.
Apis vespiformis, *De Geer, Ins.* iii. 570. 2. t. 28. f. 3.
Bembex signata, *Fabr. Syst. Ent.* p. 361. 2; *Syst. Piez.* 223. 3.
Oliv. Encycl. Méth. iv. 290. 2.
Monedula signata, *Latr. Gen. Cr. et Ins.* iv. 100.
St. Farg. & Serv. Encycl. Méth. x. 498. 1.
St. Farg. Hym. iii. 283. 2.
Dahlb. Hym. Europ. i. 185. 3.

Stictia signata, *Illig. ed. Rossi, Faun. Etrus.* 2nd ed.
Erichs. Faun. und Flora Brit. Guiana, iii. 589?

Hab. South America; Brazil.

2. MONEDULA SURINAMENSIS. B.M.

Apis Surinamensis, *De Geer, Ins.* iii. 569. 1. t. 28. f. 1.
Bembex continua, *Fabr. Syst. Piez.* 225. 15.
Monedula continua, *Latr. Gen. Cr. et Ins.* iv. 100.
St. Farg. & Serv. Encycl. Méth. x. 498.
St. Farg. Hym. iii. 287. 5.
Monedula Surinamensis, *Dahlb. Hym. Europ.* i. 187. 6.

Hab. South America; Brazil; St. Domingo.

3. MONEDULA PUNCTATA. B.M.

Bembyx punctata, *Fabr. Syst. Ent.* p. 361. 2 ♀.
Bembex punctata, *Fabr. Ent. Syst.* ii. 248. 2; *Syst. Piez.* 223. 3.
Monedula punctata, *St. Farg. & Serv. Encycl. Méth.* x. 498.
St. Farg. Hym. iii. 284. 3.
Dahlb. Hym. Europ. i. 184. 1.
Bembex maculata, *Fabr. Syst. Piez.* 222. 2 ♂ (var.).
Stictia signata et maculata, *Erichs. Faun. und Fl. Brit. Guiana,* iii. 589.

Hab. S. America; Demerara; Brazil. (Coll. W. W. Saunders, Esq.)

Var. β. The yellow markings on the thorax twice as broad as in the majority of specimens; the central spots of the abdomen enlarged and united to the lateral ones; the legs more broadly striped with yellow.

4. MONEDULA SPINOSA. B.M.

Bembex spinosa, *Fabr. Ent. Syst. Supp.* 260. 9; *Syst. Piez.* 225. 14.
Monedula spinosa, *Dahlb. Hym. Europ.* i. 494.

Hab. South America.

5. MONEDULA FUSCIPENNIS. B.M.

Monedula fuscipennis, *St. Farg. Hym.* iii. 286. 4.
Monedula Zetterstedti, *Dahlb. Hym. Europ.* i. 493.

Hab. Brazil.

6. MONEDULA MAGNIFICA. B.M.

Monedula magnifica, *Perty, Del. An. Art.* p. 144. t. 28. f. 3.

Hab. Brazil.

7. MONEDULA SIMILLIMA. B.M.

Male. Length 7 lines.—Black: a pale testaceous line on each side of the face; a line at the base of the scape in front, and a transverse one at the base of the labrum, yellow. Thorax: a stripe on the post-scutellum, a curved line beneath, and the posterior angles of the metathorax, yellow; wings smoky-hyaline; the anterior and intermediate tibiæ in front, the first joint of the tarsi in front, yellow; the claw-joint of the anterior tarsi pale testaceous, the claws black; the apex of the posterior tibiæ on the outer side, and also the base of the first joint of the tarsi outside, yellow. Abdomen: the five basal segments have on each side a large subovate macula, pointed within; the sixth and seventh segments black, the margins of the apical segment not toothed; beneath black, the second segment having in the middle a minute acute tooth.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

This species in appearance resembles *M. heros*, from which it differs not only in the colouring of the head and legs, but in having the apical segment simple: in *M. heros* it is armed on each side with a stout acute tooth.

8. MONEDULA INSULARIS.

Monedula insularis, *Dahlb. Hym. Europ.* i. 186. 4.

Hab. West Indies (St. Thomas).

9. MONEDULA DISSECTA. B.M.

Monedula dissecta, *Dahlb. Hym. Europ.* i. 186. 5.

Hab. Demerara.

10. MONEDULA PERUVIANA. B.M.

Bembex peruviana, *Guér. Icon. Règ. Anim.* iii. 437 ♂.
Monedula peruviana, *Guér. Icon. Règ. Anim.* ii. pl. 70. f. 6 ♂.
Monedula Orbignyi, *Guér. Icon. Règ. Anim.* iii. 437 ♀.
Bembex Chilensis, *Dahlb. Hym. Europ.* i. 184.

Hab. Peru; Chili.

11. MONEDULA CHILENSIS.

Monedula Chiliensis, *Spin. Gay's Chili*, vi. 314.

Hab. Chili.

12. MONEDULA ANGULATA. B.M.

Female. Length 6 lines.—Head black; the face and cheeks with a silvery pubescence; a spot on the scape in front, the anterior margin of the clypeus, the labrum and mandibles, yellow; the tips of the mandibles black; the clypeus, sides of the face, orbits of the eyes, a minute spot in front of the anterior stemma, and the antennæ, reddish-yellow; four or five of the apical joints of the flagellum black. Thorax black; the posterior margin of the prothorax, two abbreviated lines on the mesothorax anteriorly, a line on each side passing over the tegulæ, a transverse interrupted line at the base of the scutellum, the post-scutellum, an arcuate line on the metathorax and the posterior angles, yellow; the metathorax emarginate its entire width, the lateral angles acute and slightly produced; the prothorax variegated with yellow beneath, the mesothorax with an irregular yellow stripe beneath the wings; the legs reddish-yellow, striped or spotted with yellow beneath; wings hyaline, sometimes faintly smoky. Abdomen yellow, with a large angular black spot at the base; the basal and apical margins of the segments have a narrow black band, two or three of the apical bands rufo-fuscous; beneath yellow, with a ferruginous stain in the middle.

Male.—This sex only differs in being brighter coloured, and in having a stout acute tooth, curved backwards, on the second abdominal segment beneath.

Hab. Brazil (Para; Santarem).

This species, although much smaller than *M. Surinamensis*, very strongly resembles it: the acute posterior angles of the metathorax in both sexes, and the tooth on the abdomen beneath, of the male, at once separate them.

13. MONEDULA SERICEA.

Monedula sericea, *Spin. Gay's Chili*, vi. 315. 2.

Hab. Chili.

14. MONEDULA MONTEZUMA. B.M.

Female. Length 7–8 lines.—Head black; the clypeus, sides of the face, orbits of the eyes, an angulated line in front of the anterior stemma, the scape in front, labrum and mandibles, yellow; the latter black at their tips. Thorax black; the posterior margin of the prothorax, the tubercles, an irregular stripe beneath the wings, two abbreviated lines in the middle of the disk of the mesothorax, a central spot on its posterior margin, a spot on each side of the scutellum, the post-scutellum, and a curved line

on the metathorax, yellow; legs yellow, with a black spot on the trochanters and femora beneath; also a black stripe at the base of the femora above; wings subhyaline, the nervures ferruginous. Abdomen yellow, the margins of the segments ferruginous; the first segment has the base and a central pointed spot uniting with it, black, an oblique line on each side black; the second segment has a central saddle-shaped spot, and the following segments two central black dots; the apical segment has in addition a central elongate-acute angular spot.

The male closely resembles the female, but the spots on the abdomen are seldom united; the abdomen is yellow beneath, the second segment having a central longitudinal black stripe, and also a central minute acute tooth at its apical margin.

Hab. Mexico.

This is a species which varies in the markings of the abdomen; the black spots sometimes unite with the black basal margin of the segments; in some examples they are all separated, particularly in specimens of the males.

15. MONEDULA CAROLINA. B.M.

Bembex Carolina, *Fabr. Ent. Syst.* ii. 249. 7; *Syst. Piez.* 224. 11. *Coqueb. Illustr. Icon. Ins.* dec. 1. t. 6. f. 2 ♀.

Monedula Carolina, *Latr. Gen. Crust. et Ins.* iv. 100. *St. Farg. Hym.* iii. 281. 1. t. 28. f. 4. *Dahlb. Hym. Europ.* i. 185. 2.

Hab. North America; East Florida; Carolina.

16. MONEDULA 4-FASCIATA. B.M.

Monedula 4-fasciata, *Say, Narr. Exped. St. Peter's River, Append.* 70. 1.

Monedula Sallei, *Guér. Icon. Règ. Anim.* iii. 437?

Hab. Pennsylvania; N. Carolina.

17. MONEDULA VENTRALIS.

Monedula ventralis, *Say, Narr. Exped. St. Peter's River, Append.* 70. 2.

Hab. Pennsylvania.

18. MONEDULA PICTIFRONS. B.M.

Female. Length 6 lines.—Head black; the clypeus, face on each side, a triangular spot enclosing the anterior stemma, a central line uniting with it and running to the base of the cly-

peus, the outer orbit of the eyes, a narrow line on the posterior margin of the vertex, the antennæ, labrum and mandibles, yellow; tips of the mandibles black. Thorax black; the prothorax, two abbreviated central stripes on the mesothorax in front, a line passing over the tegulæ which unites with a line on the posterior margin of the scutellum, the post-scutellum, and a curved line on the metathorax, yellow; a large macula at the posterior angles of the metathorax, and a large irregular-shaped spot beneath the wings, yellow; the legs yellow, with a black stripe at the base of the femora above; wings hyaline, the nervures fuscous. Abdomen yellow; the basal margins of the segments black, each with a central bilobed black spot; beneath, the basal margins of the segments have a bilobed black fascia; the apical segment black, with a heart-shaped yellow spot at the apex.

Hab. North Carolina.

Fam. 6. NYSSONIDÆ.

Mandibles not emarginate beneath; the intermediate tibiæ with two spines at their apex. Abdomen resembling the *Larridæ*.

Genus 1. STIZUS.

Sphex, pt., *Drury, Exot. Ins.* ii. 71 (1773).
Vespa, pt., *Fabr. Ent. Syst.* ii. 254 (1793).
Stizus, *Latr. Gen. Crust. et Ins.* iv. 100 (1804).
Sphecius, *Dahlb. Hym. Europ.* i. 154 (1843).
Hogardia, *St. Farg. Hym.* iii. 288 (1845).

1. STIZUS SPECIOSUS. B.M.

Sphex speciosus, *Drury, Exot. Ins.* ii. 71. t. 38. f. 1 ♀.
Vespa tricincta, *Fabr. Ent. Syst.* ii. 254. 5; *Syst. Piez.* 254. 5, *and Mus. Dom. Banks. Cab. Linn. Soc.*
Stizus speciosus, *St. Farg. & Serv. Enc. Méth.* x. 496. 1. t. 382. f. 6.
Sphecius speciosus, *Dahlb. Hym. Europ.* i. 154.
Hogardia speciosa, *St. Farg. Hym.* iii. 290. 2.

Hab. North America.

2. STIZUS HOGARDII. Pl. VIII. fig. 4. B.M.

Stizus Hogardii, *Latr. Gen. Crust. et Ins.* iv. 100. t. 13. f. 12 ♀.
St. Farg. & Serv. Encycl. Méth. x. 496.
Hogardia rufescens, *St. Farg. Hym.* iii. 289. 1. t. 28. f. 5.

Hab. St. Domingo; Jamaica.

3. STIZUS NIGRICORNIS. B.M.

Stizus nigricornis, *Dufour, Ann. Soc. Ent. Fr.* vii. 271. 2. t. 9. f. 2 (1838).
Sphecius nigricornis, *Dahlb. Hym. Europ.* i. 480. 1.
Lucas, Explo. Sc. Algér. iii. 266.
Larra syriaca, *Klug, Symb. Phys.* dec. v. t. 46. f. 6.

Hab. Albania; South of France.

Specimens of this species from Albania differ from those received from the South of France in having the antennæ of the females more or less ferruginous; the specimens are also larger: in other respects they agree with French examples.

4. STIZUS PECTORALIS. B.M.

Female. Length 12 lines.—Ferruginous: the face covered with silvery-white pubescence, which is short and very dense on each side of the clypeus; the apical half of the mandibles black. Thorax black beneath; the metathorax black, as well as the coxæ and femora, the latter ferruginous at their apex; the disk of the thorax has a short ferruginous pubescence; the wings hyaline, yellowish towards their base. Abdomen entirely ferruginous, shining and finely punctured; the apical segment strongly punctured above.

Hab. Australia.

Genus 2. LARRA.

Sphex, pt., *Fabr. Syst. Ent.* p. 348 (1775).
Crabro, pt., *Fabr. Syst. Ent.* p. 373 (1775).
Tiphia, pt., *Fabr. Mant.* i. 278 (1787).
Vespa, pt., *Vill. Ent.* iii. 278 (1789).
Bembex, pt., *Fabr. Ent. Syst.* ii. 251 (1793).
Mellinus, pt., *Panz. Faun. Germ.* 73. 19 (1795).
Scolia, pt., *Fabr. Syst. Piez.* p. 242 (1804).
Larra, *Klug, Symb. Phys.* dec. v. (1829).
Bicyrtes, *St. Farg. Hym.* iii. 53 (1845).

The insects included in this genus have been usually placed in that of *Stizus*; but the type of the latter is the *Stizus Hogardii* of Latreille, generically distinct from the insects of the present genus, the type of which is the *Larra vespiformis*.

1. LARRA ABDOMINALIS.

Stizus abdominalis, *Dahlb. Hym. Europ.* i. 478.

Hab. Egypt.

2. Larra Ægyptia.

Stizus ægyptius, *St. Farg. Hym.* iii. 300. 9.

Hab. Egypt.

3. Larra Caffer. B.M.

Stizus caffer, *Sauss. Mém. Soc. Phys. Genève*, xiv. 28. 15. t. f. 9.

Female. Length 6½ lines.—The head, thorax and legs ferruginous; the disk of the mesothorax and the metathorax black; the lateral margins broadly ferruginous; the margins crenulated, the breast fuscous; the wings slightly fuscous, the nervures ferruginous. Abdomen shining, finely and closely punctured, and having a violet iridescence; the four basal segments having on each side a large yellow macula, the fifth and sixth segments ferruginous; beneath, ferruginous.

Hab. Port Natal.

This species closely resembles *L. fuscipennis*, but it differs in not having the basal joints of the flagellum slender.

4. Larra amœna.

Female. Length 5–6 lines.—Black: the mandibles, clypeus, scape, and five basal joints of the flagellum, ferruginous; the following joints fuscous; the extreme apex ferruginous. Thorax strongly and very closely punctured; the tegulæ and legs ferruginous; the coxæ and trochanters black; the wings reddish-brown, their base hyaline. Abdomen smooth, shining, and very delicately and closely punctured; the basal segment ferruginous, its extreme base, as well as its apical margin, black; the three apical segments pale ferruginous; the apical margins of the second and third segments obscurely rufo-testaceous; beneath, the basal segment has a central longitudinal carina; the three apical segments pale ferruginous.

Hab. West Africa. (Coll. F. Smith.)

5. Larra annulata.

Larra annulata, *Klug, Symb. Phys.* dec. v. t. 46. f. 7 ♂.

Hab. Syria.

6. Larra antennata.

Larra antennata, *Klug, Symb. Phys.* dec. v. t. 46. f. 5 ♂.

Hab. Syria.

7. LARRA APICALIS.

Stizus apicalis, *Guér. Icon. Règ. Anim.* iii. 437 ♀.

Male. Length 9 lines.—Ferruginous: the scape in front, the apical joint of the flagellum, the labrum, clypeus, the face above as high as the insertion of the antennæ, the sides, and two spots before the posterior stemmata, yellow; the mesothorax fuscous; the post-scutellum and a curved line on the metathorax yellow; the wings and abdomen as in the other sex.

Hab. Senegal. (Coll. F. Smith.)

8. LARRA ARGENTIFRONS. B.M.

Male. Length 4½ lines.—Black: the palpi, labrum, clypeus, and antennæ beneath, yellow; the face densely covered with silvery pubescence; the apical joint of the antennæ terminating in a sharp hook or spine; the eleventh joint has also a bent spine at the apex within; the fourth joint has also a short tooth beneath. Thorax: the tubercles, tegulæ and an epaulet over them, a stripe at the sides of the scutellum, a transverse line on the post-scutellum and the legs, yellow; the coxæ, except their tips, the trochanters, and the femora more or less at their base, black; the wings hyaline and iridescent, the nervures testaceous. Abdomen: the apical margins of the segments with a bisinuated yellow band; beneath, the second and three following segments have on each side an angular yellow macula.

Hab. Port Natal.

This species very closely resembles *Larra tridens* of Fabricius, of which, indeed, it may possibly be an extreme variety.

9. LARRA ATROX. B.M.

Female. Length 11 lines.—Black: the labrum, clypeus, and a spot above, the sides of the face and outer orbit of the eyes, yellow; the flagellum ferruginous; the posterior margin of the prothorax, an epaulet over the tegulæ, and the posterior margin of the latter, ferruginous; the anterior and intermediate tibiæ and tarsi ferruginous; the tips of the femora and the apex of the tibiæ within, ferruginous; the wings dark fuscous, with a violet iridescence. Abdomen shining and very delicately punctured; at the extreme apex a little fulvous pubescence.

Hab. South Africa.

10. LARRA BASALIS.

Stizus basalis, *Guér. Icon. Règn. Anim.* iii. 438.

Hab. Senegal.

11. LARRA BIPUNCTATA. B.M.

Female. Length 7 lines.—Black: the mandibles, labrum, clypeus and a spot above, the face on each side nearly as high as the anterior stemma, the scape in front, and the outer orbit of the eyes, pale yellow; the flagellum fulvous; a black spot at the base of the clypeus, and the tips of the mandibles black; the head covered with a thin white pubescence. Thorax: the posterior margin of the prothorax, the tubercles, an epaulet over the tegulæ, two large ovate spots on the scutellum, and a curved stripe on the metathorax, pale yellow; the wings hyaline, their nervures ferruginous; the legs reddish-yellow, the coxæ and trochanters black. Abdomen: the basal segment has a pale yellow band, which is notched or slightly interrupted in the middle; the second and three following segments have a broad waved band, slightly interrupted in the middle; beneath, the second and following segments have on each side an angular yellow macula.

The males have all the bands interrupted, and have the metathorax immaculate.

Hab. Albania (Yanina).

12. LARRA BIZONATA. B.M.

Stizus bizonatus, *Spin. Ann. Soc. Ent. Fr.* vii. 473. 24 (1838) ♂ ♀; fig. *Expéd. Egypt.* t. 16. f. 13 ♀.
Guér. Icon. Règn. Anim. iii. 439.
Klug, Symb. Phys. dec. v. t. 46. f. 10 (*sphegiformis*).
St. Farg. Hym. iii. 302. 11.

Hab. Egypt.

13. LARRA BLANDINA. B.M.

Female. Length 9 lines.—Black: closely punctured; the tibiæ and tarsi have a fine short silvery pile; the wings dark brown, with a violet iridescence; the tips of the anterior wings and the base of the posterior pair milky-white. The abdomen red, with the base black.

Male rather smaller, but closely resembling the female; the face densely clothed with bright silvery pile; the metathorax covered with silvery-white pubescence; the base of the abdomen has a little white pubescence; that on the rest of the abdomen is short and bright fulvous.

Hab. India.

14. LARRA CINGULATA.

Female. Length 4 lines.—Black: the scape in front, the

inner orbit of the eyes as high as the anterior stemma, the sides of the clypeus and labrum, as well as the palpi, yellow; the flagellum pale testaceous beneath. Thorax: the posterior margin of the prothorax, a minute spot at the posterior angles of the mesothorax and the post-scutellum, yellow; the metathorax emarginate its entire width, the posterior angles produced, forming acute teeth, which are yellow; the wings hyaline, the nervures black; the anterior tibiæ and tarsi yellow in front, the claw-joint entirely so. The apical margins of all the segments of the abdomen have a narrow yellow fascia, which is continued beneath; the apical segment has an angular spot on each side above.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

15. LARRA CINGULIGERA. B.M.

Female. Length 5½ lines.—Black: the scape in front and the clypeus yellow, the latter covered with bright silvery pile; the flagellum beneath, except two or three of the basal joints, fulvous. Thorax: the posterior margin of the prothorax and the tubercles yellowish-white; the tegulæ and legs ferruginous; the coxæ and anterior femora beneath fuscous; the wings hyaline, the nervures fuscous. Abdomen: the first and three following segments have towards their apical margins an uninterrupted yellowish-white band; the apical margins of the segments, beneath, have a yellowish-white bisinuated fascia.

Hab. Interior of South Africa.

16. LARRA CITRINA.

Larra citrina, *Klug, Symb. Phys.* dec. v. t. 46. f. 4 ♀.

Hab. Egypt.

17. LARRA COMBUSTA. B.M.

Female. Length 8–9 lines.—Head black; a narrow line at the outer orbit of the eyes, the face below the anterior stemma, the clypeus, mandibles and antennæ, ferruginous; the tips of the mandibles black; the apical joints of the flagellum fuscous above. Thorax black; the prothorax, sides of the mesothorax, the scutellum, the tegulæ and legs, ferruginous; the posterior legs more or less fuscous; wings dark brown, with a violet iridescence. Abdomen fusco-ferruginous, shining, and closely and finely punctured; beneath, clear red at the base.

Hab. Asia Minor (Trebizond).

18. LARRA CONICA.

Stizus conicus, *Germar, Reise nach Dalm.* p. 262. 358.
Van d. Lind, Obs. ii. 16. 3.
Dahlb. Hym. Europ. i. 152. 87.

Hab. Dalmatia (Spalatro).

19. LARRA DELESSERTII.

Stizus Delessertii, *Guér. Icon. Règ. Anim.* iii. 439.

Hab. India (Pondicherry).

20. LARRA DICHROA.

Larra dichroa, *Klug, Symb. Phys.* dec. v. t. 46. f. 9 ♂.

Hab. Egypt.

21. LARRA ELEGANS.

Stizus elegans, *Dahlb. Hym. Europ.* i. 478.

Hab. Egypt.

22. LARRA FASCIATA. B.M.

Larra fasciata, *Fabr. Ent. Syst. Supp.* 253. 7-8; *Syst. Piez.* 221. 13.
Klug, Symb. Phys. dec. v. t. 46. f. 14?
Stizus fasciatus, *Dahlb. Hym. Europ.* i. 153.

Hab. Tranquebar; Northern India; Ethiopia (Ambukohl).

23. LARRA FENESTRATA. B.M.

Male. Length 8 lines.—Black: the face covered with short cinereous pubescence; a slightly raised carina passes from the base of the clypeus between the antennæ, not extending to the anterior stemma. The metathorax covered with cinereous pubescence; the wings black, hyaline at their base, and the extreme apex of the superior pair hyaline. Abdomen shining, finely punctured, and covered with a cinereous pilosity.

Hab. Congo.

24. LARRA FERRUGINEA.

Male. Length 8 lines.—Ferruginous: the clypeus, labrum, mandibles, scape in front, and outer orbit of the eyes, yellow. The posterior margin of the prothorax and the tubercles yellow; the mesothorax and a transverse stripe beneath the post-scutellum black; the wings fulvo-hyaline, the nervures ferruginous; a dark fuscous cloud occupies the marginal cell. Abdomen: the

third segment has on each side an arcuate yellow stripe; the fourth and fifth segments have an interrupted yellow fascia; the sixth an entire yellow fascia; beneath, the third and three following segments have their apical margins yellow. The head and thorax have a thin cinereous pubescence; the abdomen has a short yellow pubescence.

Hab. The Gambia. (Coll. F. Smith.)

25. LARRA FLAVIPES.

Female. Length 4½ lines.—Black: the antennæ in front, the clypeus, labrum and mandibles, yellow. Thorax: the anterior and posterior margins of the prothorax, the tubercles, a spot beneath the wings, the tegulæ and an epaulet over them, a spot on each side of the scutellum, the post-scutellum, the lateral posterior angles of the metathorax, and the legs, yellow; the metathorax truncated and hollowed out behind; the wings hyaline, their nervures ferruginous. Abdomen: the basal segment has on each side a large angular yellow spot, the two uniting in the middle of the segment; the four following segments have a bisinuated fascia on their apical margins; the sixth segment ferruginous at its apex.

Hab. The Gambia. (Coll. F. Smith.)

26. LARRA DUBIA.

Male. Length 4 lines.—Black: the clypeus and an angular spot above, the labrum, palpi, a spot on the mandibles and the antennæ beneath, yellow; the clypeus covered with silvery pubescence. Thorax: the posterior margin of the prothorax, the tubercles, a spot beneath the wings, the tegulæ and an epaulet over them, a spot on each side of the scutellum, the post-scutellum, and the lateral margins of the metathorax, yellow; the angles of the latter acute; the anterior and intermediate legs yellow, with a black stripe on the femora and tibiæ behind; the tarsi have a dark stain behind; the posterior legs black, a yellow stripe on the femora above at their base; the knees, and a stripe on the tibiæ at their apex beneath, yellow; the coxæ and trochanters black; wings subhyaline, the second submarginal cell *petiolated*. Abdomen: the basal segment with a broad yellow band on its apical margin sinuated in the middle; the other segments have a bisinuated fascia, the two apical segments yellow beneath, the second and following segments with a narrow yellow fascia on their apical margins; the abdomen is thinly covered with short pale pubescence.

Hab. Brazil (Villa Nova).

This species, having the second submarginal cell petiolated, would, by a rigorous adherence to the wing-system, be excluded from the genus *Larra*; but an examination of a large number shows that in all the smaller species the second submarginal cell has a tendency to become narrowed towards the marginal: in *L. tridentata* the nervures frequently unite at their junction with the marginal cell, and are sometimes even distinctly petiolated; under these circumstances the present species is retained in the genus.

27. LARRA FULIGINOSA. B.M.

Larra fuliginosa, *Klug, Symb. Phys.* dec. v. t. 46. f. 11 ♂.

Hab. Egypt; Gambia.

28. LARRA FUSCIPENNIS. B.M.

Female. Length 7–9 lines.—Black: the head ferruginous, with a fuscous stain above the insertion of each antenna, the stain sometimes nearly obsolete; the labrum, mandibles and clypeus usually more or less yellow; the antennæ ferruginous; the flagellum very slender at the base. The prothorax, tubercles, sides of the mesothorax, tegulæ, scutellum and legs, ferruginous; in some examples, a large ferruginous spot beneath the wings; the head and thorax have a thin griseous pubescence, most dense on the metathorax; the wings fuscous, their apical margins pale, the nervures ferruginous. Abdomen delicately punctured, shining, and having a violet iridescence, thinly covered with cinereous pubescence, which is most dense on the basal segment; the second and third segments have on each side a large yellow macula; the two apical segments ferruginous; beneath, the two basal and apical segments ferruginous.

Male.—This sex only differs in having the apex of the abdomen less red.

Hab. Port Natal.

29. LARRA GRANDIS. B.M.

Stizus grandis, *St. Farg. Hym.* iii. 293. 2.
Lucas, Explo. Sc. Algér. iii. 263. t. 13. f. 8.

Hab. Algeria.

30. LARRA HIRTULA. B.M.

Male. Length 3¼ lines.—Black: the labrum, clypeus, and scape in front, white; a black spot in the centre of the clypeus; the flagellum fulvous beneath. Thorax: the posterior margin

of the prothorax, the tubercles, tegulæ and legs, ferruginous; the coxæ, trochanters and femora at their base black; the wings hyaline, their nervures black; the metathorax truncated. Abdomen: the basal segment has a transverse yellow fascia towards its apical margin, the edge of the fascia bordered with ferruginous; the third segment has a ferruginous band on its apical margin; the margins of the other segments have a yellow fascia more or less suffused with ferruginous colouring; the insect covered with suberect cinereous pubescence.

Hab. Adelaide.

31. LARRA INFUSCATA.

Larra infuscata, *Klug, Symb. Phys.* dec. v. t. 46. f. 11 ♂.

Hab. Ethiopia (Ambukohl).

32. LARRA INTEGER. B.M.

Bembex integer, *Fabr. Ent. Syst.* ii. 251. 12; *Syst. Piez.* 226. 18.
Stizus integer, *Spin. Ins. Lig.* i. 74. 1.
Van d. Lind, Obs. ii. 15. 2.
Dahlb. Hym. Europ. i. 152. 86.

Hab. France; Italy; Germany; Spain; Albania.

33. LARRA KLUGII.

Larra apicalis, *Klug, Symb. Phys.* dec. v. t. 46. f. 13 ♂ (nec. *Guér.*).

Hab. Egypt.

34. LARRA LEPIDA.

Larra lepida, *Klug, Symb. Phys.* dec. v. t. 46. f. 1 ♂.

Hab. Egypt.

35. LARRA LORICULATA.

Male. Length 7–8 lines.—Black: the scape in front, the face below the insertion of the antennæ, a narrow transverse line in front of the stemmata, and another running down the face to the base of the clypeus, the latter, and also the labrum, yellow; the outer orbit of the eyes reddish-yellow; the mandibles and antennæ ferruginous. Thorax: the posterior margin of the prothorax and tubercles, as well as the post-scutellum, yellow; a large macula on each side of the scutellum; the lateral posterior angles of the metathorax and the legs fulvous; the coxæ and trochanters black; the metathorax truncate, the margins of the truncation denticulate, the teeth ferruginous; the wings fulvo-hyaline, the

nervures ferruginous. Abdomen: each segment has a large bell-shaped macula in the centre, on each side of which is a large oblong macula, giving the abdomen the appearance of a coat of mail; beneath, the apical margins of the segments fulvous.

Hab. The Gambia. (Coll. F. Smith.)

36. LARRA MELANOPTERA.

Stizus melanopterus, *Dahlb. Hym. Europ.* i. 478.

Hab. Rhodes.

37. LARRA MELANOXANTHA.

Male. Length 6 lines.—Yellow: the flagellum fulvous; the vertex black; the apical joints of the antennæ fuscous above; the tips of the mandibles rufo-piceous. The mesothorax, the post-scutellum, and two oblique lines on the metathorax uniting at its apex, black; the wings hyaline, the marginal cell occupied by a fuscous cloud. The extreme base of the abdomen black, the black colouring produced in the middle into an angular spot which extends down half the length of the segment; the apical margins of the first and three following segments black, and an angular black spot in the middle of their base; the apical segment ferruginous.

Hab. India. (Coll. W. W. Saunders, Esq.)

38. LARRA MELLEA.

Female. Length 5 lines.—Honey-yellow: the flagellum and vertex pale ferruginous; three longitudinal ferruginous stripes on the mesothorax, and the margins of the scutellum and post-scutellum ferruginous; the legs in some individuals with ferruginous stains; the wings fulvo-hyaline, a fuscous cloud occupying the marginal cell, the nervures ferruginous; the basal and apical margins of the segments of the abdomen narrowly ferruginous.

Hab. India. (Coll. W. W. Saunders, Esq.)

39. LARRA MIONII.

Stizus Mionii, *Guér. Icon. Règ. Anim.* iii. 438.

Hab. Senegal.

40. LARRA MONEDULOIDES. B.M.

Female. Length 3 lines.—Black: the margins of the clypeus, the labrum, palpi, and antennæ beneath, pale yellow; the fla-

gellum somewhat fulvous beneath; the face has a short silvery pubescence. Thorax: the posterior margin of the prothorax, the tubercles, a spot on the tegulæ in front, another at the posterior lateral angles of the mesothorax, a stripe on each side of the scutellum, the post-scutellum, and the lateral angles of the metathorax, yellow; the anterior and intermediate tibiæ in front and the tarsi yellow; the latter have a ferruginous tinge above; the posterior tibiæ have a yellow stripe at their base above, the tarsi rufo-fuscous; the wings subhyaline, their nervures fuscous. Abdomen: all the segments have a bisinuated marginal fascia.

Male.—This sex has the labrum, mandibles, palpi, clypeus, inner orbit of the eyes, the scape in front and the base of the flagellum, yellow; the tibiæ and tarsi are also yellow; the bands on the abdomen are broader; the three basal segments have a cinereous pubescence, that on the following is black.

Hab. St. John's Bluff, East Florida.

41. LARRA NUBILIPENNIS. B.M.

Female. Length 7 lines.—Honey-yellow: the flagellum fulvous; the vertex with a transverse black line and a spot before the anterior stemma. The thorax reddish-yellow, with three black stripes; the breast has a large black patch which runs up the sides to the insertion of the wings; a transverse stripe on the metathorax at its base, and one or two oblique stripes on the truncated portion; the stripes vary in length in different individuals. Abdomen ferruginous at the base, the apical margins of the two basal segments fuscous; sometimes the margins of all the segments are ferruginous; beneath, the two basal segments yellow, the apical segments ferruginous.

Hab. India.

42. LARRA ORNATA. B.M.

Stizus ornatus, *St. Farg. Hym.* iii. 294. 3.
Dahlb. Hym. Europ. i. 477.
Lucas, Explo. Sc. Algér. iii. 264. t. 13. f. 9.

Hab. Algeria (Oran).

43. LARRA PEREGRINA.

Male. Length 5 lines.—Black: the antennæ beneath, the clypeus, labrum, mandibles and palpi, yellow; the apical joint of the antennæ produced into a sharp spine, the eleventh joint has a sharp spine beneath. Thorax: the posterior margin of the prothorax, the tubercles, tegulæ and an epaulet over them, a spot

on each side of the scutellum and the post-scutellum, yellow; the wings hyaline, the nervures ferruginous; the legs yellow, with the coxæ, except their tips, the anterior and intermediate femora above, black; the posterior femora black, with their apex yellow, and a black spot on the anterior tibiæ beneath. Abdomen: a broad yellow band on the apical margins of all the segments; the first band slightly narrowed in the middle, the three following with two square notches on their anterior margin; beneath black; the second segment with a large stout bent tooth in the middle; the sixth segment has an obtuse tubercle in the middle.

Hab. Albania (Privesa).

Having only seen a single specimen of this species, it has not been thought advisable to remove it from the genus *Larra*, from which, however, it differs not only in having the venter armed with a tooth, as in the genus *Monedula*, but in having also a difference in the neuration of the wings; the marginal cell does not extend beyond the third recurrent nervure, and at the apex is abruptly truncated.

44. LARRA PERRISI.

Stizus Perrisi, *Dufour*, *Ann. Soc. Ent. Fr.* vii. 269. t. 9. f. 1.
St. Farg. Hym. iii. 295. 4.

Hab. France.

45. LARRA PICTA.

Stizus pictus, *Dahlb. Hym. Europ.* i. 478.

Hab. Egypt.

46. LARRA PULCHERRIMA. B.M.

Female. Length 9 lines.—Black: the labrum, clypeus, inner orbit of the eyes as high as the anterior stemma, and a narrow line at the outer orbit, pale yellow; a yellow spot on the scape in front; the apical joint of the antennæ and the tips of the other joints beneath fulvous. Thorax: the posterior margin of the prothorax and also that of the scutellum, the post-scutellum and the tubercles, pale yellow; the legs ferruginous, with the coxæ and trochanters black; the tegulæ and an epaulet over them reddish-yellow; the wings fulvo-hyaline, the nervures ferruginous. Abdomen: an oblong macula on each side of the basal segment in the middle, another on the second segment rather longer and pointed within, a bisinuated waved fascia slightly interrupted in the middle, on the third, a bisinuated entire fascia at the base of the fourth segment, and a spot in the middle of

the fourth at its base, of a pale yellow; beneath, the second and third segments have on each side a minute yellow spot.

Hab. Shanghai. (Coll. R. Fortune, Esq.)

47. LARRA REVERSA. B.M.

Female. Length 2¼ lines.—Black: the clypeus and a spot above, the scape in front, the anterior margin of the labrum and the palpi, yellow. Thorax: the posterior margin of the prothorax, the tubercles, a spot on the tegulæ, another behind them, a spot on each side of the scutellum, another on the postscutellum, and the lateral margins of the metathorax, yellow; the latter hollowed out behind; the anterior femora beneath, a stripe on the intermediate femora beneath at their apex, the anterior and intermediate tibiæ and tarsi in front, yellow; the posterior tibiæ have a yellow stripe at their base above; the wings hyaline, their nervures testaceous. Abdomen: an interrupted yellow band on the basal segment, an entire one on the apical margin of the second, widest laterally, a spot in the middle of the margin of the third, a narrow band on the fourth, and a spot on each side of the fourth; the insect covered with a scattered hoary pubescence.

The male closely resembles the female, but differs in having the clypeus black, and in having five entire yellow bands on the abdomen, the first broad and sinuated in the middle of its anterior margin.

Hab. Sumatra.

This species closely resembles the *Larra tridentata*, but is quite distinct, the colouring of the face of the sexes being the reverse of the European species; the abdomen is very delicately punctured, whereas it is rather strongly impressed in *L. tridentata*.

48. LARRA RUFESCENS. B.M.

Female. Length 10 lines.—Rufo-fulvous: the face, clypeus, labrum, antennæ in front, and the cheeks, reddish-yellow; the mesothorax, the posterior margin of the scutellum, the postscutellum, and an arched stripe on the metathorax, yellow; the legs dashed with yellow; the wings yellow-hyaline, a fuscous cloud occupying the marginal and the second and third submarginal cells; the nervures ferruginous; the abdomen has an ovate-yellow macula on each side of the three basal segments, that on the first segment minute.

Var. *a*. The apical margins of the three basal segments fuscous, or black.

Hab. India (Punjaub).

49. LARRA RUFIPES.

Bembex rufipes, *Oliv. Encycl. Méth.* iv. 292. 12.
Van d. Lind, Obs. ii. 17. 5.
St. Farg. Hym. iii. 299. 8.
Lucas, Explo. Sc. Algér. iii. 265.

Hab. France; Algeria. (Coll. F. Smith.)

50. LARRA RUFICORNIS. B.M.

Bembex ruficornis, *Fabr. Mant. Ins.* i. 286. 9; *Ent. Syst.* ii. 252. 16.
Oliv. Encycl. Méth. iv. 291. 4.
Vespa ruficornis, *Vill. Ent.* iii. 278. 31.
Gmelin, Syst. Nat. p. 2769. 159.
Stizus ruficornis, *Latr. Hist. Nat.* xiii. 303. 2.
Spin. Ins. Lig. i. 74. 2.
Van. d. Lind, Obs. ii. 14. 1.
Dahlb. Hym. Europ. i. 151. 85.
St. Farg. Hym. iii. 291. 1.
Lucas, Explo. Sc. Algér. iii. 264.

Hab. France; Germany; Italy; Spain; Albania.

51. LARRA RUFOCINCTA.

Stizus rufocinctus, *Dahlb. Hym. Europ.* i. 478.

Hab. Egypt.

52. LARRA SERVILLII. B.M.

Bicyrtes Servillii, *St. Farg. Hym.* iii. 53. 1.

Hab. North America.

An examination of a large number of species of this genus shows the necessity for considerable latitude being given for variation in the neuration of the anterior wings: a slight deviation from the type, *L. vespiformis*, cannot be regarded as of generic value; and the truncation or hollowing out of the metathorax is common to several species; to this division belong the species *L. fuscipennis, affinis, loriculata, fenestrata, argentifrons*, and *tridentata*. A slight difference in the neuration, and the truncation of the metathorax, are the only differences which constitute the genus *Bicyrtes* of St. Fargeau.

53. LARRA SUCCINEA.

Larra succinea, *Klug, Symb. Phys.* dec. vi. t. 46. f. 3 ♂ ♀.

Hab. Egypt.

54. LARRA TENELLA.

Larra tenella, *Klug, Symb. Phys.* dec. v. t. 46. f. 8 ♂.

Hab. Egypt.

55. LARRA TENUICORNIS.

Male. Length 7 lines.—Black: the face below the insertion of the antennæ, and a narrow line at the inner orbits of the eyes, not running upwards so high as the anterior stemma, the scape in front, the clypeus, labrum and outer orbit of the eyes, yellow; a narrow black line runs from the antennæ to the base of the clypeus, which has a black spot; the mandibles and antennæ fulvous; the first joint of the flagellum very slender, its apex as well as that of the two following produced beneath. Thorax: the prothorax, the mesothorax on each side, the tubercles, tegulæ, scutellum and legs, ferruginous; the tibiæ have a yellow stain above; the wings fusco-ferruginous, the nervures ferruginous. Abdomen: the basal segment has a yellow macula on each side, the three following a broad interrupted band; the fifth and sixth segments yellow, with a central longitudinal ferruginous line; the apical segment ferruginous; beneath, the two basal segments have a large ferruginous macula.

Hab. The Gambia. (Coll. F. Smith.)

56. LARRA TRIDENTATA. B.M.

Crabró tridentatus, *Fabr. Syst. Ent.* 373. 1; *Mant.* i. 294. 1 ♂.
Vespa tridentata, *Vill. Ent.* iii. 279. 27.
Gmelin, Syst. Nat. p. 2761. 98.
Bembex tridentata, *Fabr. Ent. Syst.* ii. 251. 14.
Scolia tridentata, *Fabr. Syst. Piez.* 242. 22.
Larra bifasciata, *Fabr. Ent. Syst. Supp.* p. 252. 5 ♀; *Syst. Piez.* 220. 6.
Stizus bifasciatus, *Jurine, Hym.* p. 176. t. 14 ♂.
Latr. Gen. Crust. et Ins. iv. 101.
Van d. Lind, Obs. ii. 16. 4 ♂ ♀.
Dahlb. Hym. Europ. i. 152. 88.
St. Farg. Hym. iii. 298. 7.
Lucas, Explo. Sc. Algér. iii. 266.

Hab. France; Algeria.

57. LARRA TRIDENS.

Vespa tridens, *Fabr. Spec. Ins.* i. 464. 33 ♂; *Mant.* i. 289. 38.
Vill. Ent. iii. 275. 22.

Vespa tridens, *Gmelin*, p. 2751. 42.
Oliv. Encycl. Méth..vi. 686. 83.
Crabro tridens, *Fabr. Ent. Syst.* ii. 298. 18; *Syst. Piez.* p.313. 23.
Crabro cinctus, *Rossi, Faun. Etrus.* ii. 890 ♂.
Mellinus repandus, *Panz. Faun. Germ.* 73. 19 ♀.
Stizus sinuatus, *Latr. Hist. Nat.* xiii. 303. 3.
Spin. Ins. Lig. i. 74. 3.
Larra tridens, *Illig. ed. Faun. Etrus.* ii. 890.
Stizus repandus, *Jurine, Hym.* p. 178.
Stizus tridens, *Van d. Lind, Obs.* ii. 17. 6 ♂ ♀.
Dahlb. Hym. Europ. i. 153. 89.
St. Farg. Hym. iii. 301. 10.
Lucas, Explo. Sc. Algér. iii. 266.

Hab. Italy; France; Germany; Albania; Algeria.

58. LARRA VESPIFORMIS. B.M.

Sphex vespiformis, *Fabr. Spec. Ins.* i. 447. 23.
Tiphia vespiformis, *Fabr. Mant. Ins.* i. 178. 1.
Larra vespiformis, *Fabr. Ent. Syst.* ii. 220. 1; *Syst. Piez.* 219. 1.
Stizus vespiformis, *Dahlb. Hym. Europ.* i. 154.
St. Farg. Hym. iii. 297. 6.

Hab. India (Madras; Punjaub; Northern India).

59. LARRA ZONATA.

Larra zonata, *Klug, Symb. Phys.* dec. v. t. 46. f. 2 ♀.

Hab. Arabia Felix.

Genus 3. EXEIRUS.

Exeirus, *Shuck. Trans. Ent. Soc. Lond.* ii. 71 (1836).

1. EXEIRUS LATERITIUS. B.M.

Exeirus lateritius, *Shuck. Trans. Ent. Soc. Lond.* ii. 72. t. 8. f. 2.

Hab. Sydney; New South Wales; Tasmania.

Genus 4. NYSSON.

Crabro, pt., *Fabr. Syst. Ent.* 373 (1775).
Sphex, pt., *Fabr. Ent. Syst.* ii. 215 (1793).
Pompilus, pt., *Fabr. Ent. Syst. Supp.* 251 (1798).
Mellinus, pt., *Fabr. Ent. Syst. Supp.* 266 (1798).
Nysson, *Latr. Hist. Nat.* xiii. 305 (1804).
Oxybelus, pt., *Fabr. Syst. Piez.* 316 (1804).

1. NYSSON SPINOSUS. B.M.

Crabro spinosus, *Fabr. Syst. Ent.* 373. 2; *Ent. Syst.* ii. 293. 1; *Syst. Piez.* 307. 1.
Rossi, Faun. Etrus. Mant. i. 139. 308.
Panz. Faun. Germ. 62. 15 ♂.
Mellinus interruptus, *Panz. Faun. Germ.* 72. 13 ♀.
Nysson spinosus, *Latr. Hist. Nat.* xiii. 305; *Gen. Crust. et Ins.* iv. 91.
Oliv. Encycl. Méth. viii. 408.
Van d. Lind, Obs. ii. 30. 1.
Shuck. Foss. Hym. 100. 1.
Dahlb. Hym. Europ. 169. 100 & 484. 1.
Wesm. Hym. Foss. Belg. 74. 1.
Sphex spinosa, *Villers, Ent.* iii. 246. 71.
Nysson geniculatus, *St. Farg. Hym.* iii. 47. 3 ♂.

Hab. Britain; France; Italy; Germany; Belgium; Norway.

2. NYSSON INTERRUPTUS. B.M.

Mellinus interruptus, *Fabr. Ent. Syst. Supp.* 266. 4. 5.
Oxybelus interruptus, *Fabr. Syst. Piez.* 316. 1.
Mellinus dissectus, *Panz. Faun. Germ.* 77. 18.? ♀.
Nysson maculatus, *Van d. Lind, Obs.* ii. 31. 4?
Dahlb. Hym. Europ. i. 170. 103?
Nysson omissus, *Dahlb. Hym. Europ.* i. 485. 3.
Nysson interruptus, *Shuck. Foss. Hym.* 101. 2.
St. Farg. Hym. Europ. iii. 45. 1.
Wesm. Hym. Foss. Belg. 80. 5.
Nysson Panzeri, *St. Farg. Hym.* iii. 52. 8.
Nysson Shuckardi, *Wesm. Hym. Foss. Belg.* 75. 2.

Hab. Britain; France; Germany; Belgium; Sweden; Scandinavia.

3. NYSSON MACULATUS. B.M.

Sphex maculata, *Fabr. Ent. Syst.* ii. 215. 70.
Pompilus maculatus, *Fabr. Ent. Syst. Supp.* 251. 32; *Syst. Piez.* 196. 42.
Crabro trimaculatus, *Panz. Faun. Germ.* 78. 18 ♀, 51. 13 ♂.
Nysson interruptus, *Latr. Hist. Nat.* xiii. 306. 3.
Nysson maculatus, *Van d. Lind, Obs.* ii. 31. 4.
Dahlb. Hym. Europ. i. 170. 103.
Wesm. Hym. Foss. Belg. 78. 4.

Hab. Germany; Brussels; France?

4. NYSSON TRIMACULATUS. B.M.

Crabro trimaculatus, *Rossi, Faun. Etrus.* ii. 95. 892 ♂.
Nysson nigripes, *Spin. Ins. Lig.* ii. 45. 38.
St. Farg. Hym. iii. 46. 2.
Nysson interruptus, *Oliv. Encycl. Méth.* viii. 408. 2.
Nysson trimaculatus, *Van d. Lind, Obs.* ii. 30. 2 ♂ ♀.
Shuck. Foss. Hym. 102. 3.
Dahlb. Hym. Europ. i. 169. 101.
Wesm. Hym. Foss. Belg. 77. 3.

Hab. Britain; Italy; France; Germany; Belgium; Sweden; Lapland; Finland.

5. NYSSON DIMIDIATUS. B.M.

Nysson dimidiatus, *Jurine, Hym.* 199. t. 10. gen. 22.
Van d. Lind, Obs. ii. 33. 6.
Shuck, Foss. Hym. 104. 5.
Dahlb. Hym. Europ. i. 171. 105.
St. Farg. Hym. iii. 49. 5.
Wesm. Hym. Foss. Belg. 82. 6.
Nysson Wesmaeli, *St. Farg. Hym.* iii. 50. 6.
Nysson quadriguttatus, *Spin. Ins. Lig.* ii. 43?

Hab. Britain; France; Germany; Belgium.

6. NYSSON GUTTATUS. B.M.

Nysson guttatus, *Oliv. Encycl. Méth.* viii. 409. 7.
Shuck. Foss. Hym. 103. 4.

Hab. Britain; France; Albania.

This is probably a highly-coloured variety of the *N. maculatus*; a still more highly-coloured example of that species is in the collection of the British Museum, from Albania; both being, in all probability, varieties of *N. dimidiatus*.

7. NYSSON SCALARIS. B.M.

Nysson scalaris, *Illig. ed. Faun. Etrus.* ii. 157.
Nysson Dufourii, *St. Farg. Hym.* iii. 51. 7.
Nysson Dufouri, *Dahlb. Hym. Europ.* 485. 8.

Hab. France.

8. NYSSON EPEOLIFORMIS. B.M.

Female. Length 5¼ lines.—Black: the head and thorax coarsely punctured; the face and cheeks with bright silvery pubescence; on the vertex and disk of the thorax a thin auri-

chalceous pile; the clypeus and base of the mandibles yellowish-white; on the clypeus anteriorly is a triangular black spot, the tips of the mandibles rufo-piceous, the scape in front and one or two of the basal joints of the flagellum ferruginous; the rest of the flagellum is fusco-ferruginous beneath. Thorax: an interrupted line on the collar, the tubercles and a transverse line at the base of the scutellum, yellow; the tegulæ, posterior angles of the mesothorax and the legs ferruginous; the coxæ and trochanters black, except at their apex; at the base of the metathorax a coarsely reticulated enclosed space; the lateral angles spinose and covered with silvery pubescence. Abdomen: the four basal segments have laterally an oblong subovate pale yellow macula; the abdomen is finely punctured above and strongly so beneath.

Male.—Very closely resembles the female, but has the clypeus immaculate, the scape and basal joint of the flagellum yellow in front, and the abdomen has two additional spots on the fifth segment.

Hab. Albania. (Coll. S. S. Saunders, Esq.)

9. NYSSON DECEM-MACULATUS.

Nysson decem-maculatus, *Spin. Ins. Lig.* ii. 41.
Van d. Lind, Obs. ii. 33. 5.
Dahlb. Hym. Europ. i. 171. 104.

Hab. Italy.

10. NYSSON ABDOMINALIS.

Nysson abdominale, *Guér. Icon. Règ. Anim.* iii. 441.

Hab. Senegal.

11. NYSSON BASALIS.

Male. Length 4 lines.—Black: the face thinly covered with silvery pubescence; the apical joint of the antennæ rufo-testaceous; the head and thorax rugose; the posterior angles of the metathorax covered with silvery pubescence; the wings fusco-hyaline. The base of the abdomen covered with silvery pile; at the lateral apical margins of the four basal segments an elongate, subovate, yellowish-white macula, each in succession smaller than that on the basal segment; sometimes a minute one on the fifth segment; the lateral apical margins of the sixth and seventh segments produced into acute spines, the apical margin of the seventh segment rounded.

Hab. India. (Coll. W. W. Saunders, Esq.)

12. NYSSON? MARGINATUS.

Nysson marginatus, *Spin. Ann. Soc. Ent. Fr.* x. 113. 68. t. 3. f. 11 (1841).

Hab. Cayenne.

13. NYSSON RUFO-PICTUS. B.M.

Female. Length 4 lines.—Head and thorax black; the clypeus, mandibles, scape, and five or six of the basal joints of the flagellum, ferruginous. Thorax: the collar, tubercles, a large spot beneath the wings, the tegulæ and posterior angles of the mesothorax, the scutellum, post-scutellum, and tips of the spines which arm the metathorax and the legs, ferruginous; the lateral angles of the metathorax covered with silvery pubescence. Abdomen ferruginous; the basal margin of each segment has a central triangular black spot, the entire margin of one or two of the basal segments is also narrowly black, with angular black spots at the sides; beneath, the third, fourth and fifth segments are black.

Hab. ——?

14. NYSSON AURINOTUS.

Nysson aurinotus, *Say, Bost. Journ.* i. 368.

Hab. N. America (Indiana).

15. NYSSON GAYI.

Nysson Gayi, *Spin. Gay's Chili*, vi. 347. 1.

Hab. Chili.

Genus 5. SERICOPHORUS.

Sericophorus (*Shuck. MSS.*), *Smith, Ann. & Mag. Nat. Hist.* 2nd ser. vii. 32 (1851).

Tachyrrhostus, *Sauss. Mém. Soc. Phys. Genève*, fasc. 1. 24 (1854).

1. SERICOPHORUS CHALYBEUS. Pl. IX. fig. 1. B.M.

Sericophorus chalybeus, *Ann. & Mag. Nat. Hist.* 2nd ser. vii. 32.

Tachyrrhostus cyaneus, *Sauss. Mém. Soc. Phys. Genève*, fasc. 1. 26. 14.

Hab. Australia.

2. SERICOPHORUS VIRIDIS.

Tachyrrhostus viridis, *Sauss. Mém. Soc. Phys. Genève*, fasc. 1. 25. 13.

Hab. Australia.

3. SERICOPHORUS RELUCENS. B.M.

Female. Length 3 lines.—Black: the front with a fine golden pile, that on the cheeks silvery; the flagellum of an orange-yellow beneath; the mandibles ferruginous, palest at their base. The prothorax posteriorly ferruginous, with an interrupted transverse pale yellow line; the scutellum, post-scutellum, tegulæ and legs ferruginous; the coxæ, trochanters, and extreme base of the femora black; the hinder margin of the mesothorax with a little golden pubescence; the metathorax has an enclosed portion at the base above, which is covered with thin golden pile; at the base of the metathorax is a transverse deep channel, from which a broad deep one runs downwards to the insertion of the abdomen; the wings hyaline, the nervures ferruginous. Abdomen covered with a rich effulgent golden pile, the segments in certain lights exhibiting angular silvery patches of pubescence; the apical margins of the segments narrowly rufo-piceous; the apical segment ferruginous; beneath smooth and shining, with a few scattered punctures.

Hab. Australia (Adelaide).

Genus 6. PALARUS.

Crabro, pt., *Fabr. Spec. Ins.* i. 470.
Philanthus, pt., *Fabr. Syst. Piez.* 304. 13 (1804).
Palarus, *Latr. Hist. Nat.* xiii. 74.
Gonius, *Jurine, Hym.* 205 (1807).

1. PALARUS FLAVIPES. B.M.

Crabro flavipes, *Fabr. Spec. Ins.* i. 470; *Mant. Ins.* i. 295. 8.
Rossi, Faun. Etrus. Mant. i. 136. 301.
Oliv. Encycl. Méth. vi. 513. 10.
Philanthus flavipes, *Fabr. Ent. Syst.* ii. 290. 7; *Syst. Piez.* 304. 13.
Panz. Faun. Germ. 84. 24.
Palarus flavipes, *Latr. Hist. Nat.* xiii. 74. t. 14. f. 1 ♂; *Encycl. Méth.* viii. 651. 3; *Gen. Crust. et Ins.* iv. 74. t. 14. f. 1.
Desm. Dict. Sc. Nat. i. 251.
Guér. Dict. Class. xii. 607.
Van d. Lind, Obs. i. 20. 1.
Dahlb. Hym. Europ. i. 124. 60.
St. Farg. Hym. iii. 232. i. t. 27. f. 4 ♂.
Sauss. Mém. Soc. Phys. Genève, xiv. fasc. i. 13.
Gonius flavipes, *Jurine, Hym.* 205. t. 10. gen. 24 ♂.
Panz. Krit. Revis. ii. 178.

Hab. France; Italy; Spain; Germany.

2. PALARUS HISTRIO.

Palarus histrio, *Spin. Ann. Soc. Ent. Fr.* 1st ser. vii. 474. 25 (1838).
Savigny, Expéd. d'Egypt. t. 11. f. 14?
St. Farg. Hym. iii. 233. 2.
Sauss. Mém. Soc. Phys. Genève, xiv. fasc. 1. 13.
Palarus lætus, *Klug, Symb. Phys.* dec. v. t. 47. f. 4, 5.
Hab. Egypt (Sakkara).

3. PALARUS SPINOLÆ.

Palarus Spinolæ, *Sauss. Mém. Soc. Phys. Genève*, xiv. fasc. 1. 14. f. 3 ♀.
Hab. Egypt.

4. PALARUS RUFIPES.

Palarus rufipes, *Oliv. Encycl. Méth.* viii. 651. 2.
Spin. Ann. Soc. Ent. Fr. 1st ser. vii. 475. 14 ♂.
Sauss. Mém. Soc. Phys. Genève, xiv. fasc. 1. 15.
Hab. Egypt.

5. PALARUS DONGALENSIS.

Palarus Dongalensis, *Klug, Symb. Phys.* dec. v. t. 47. f. 1, 2.
Hab. Ethiopia (Ambukohl).

6. PALARUS HUMERALIS. Pl. IX. fig. 2. B.M.

Palarus humeralis, *Duf. Ann. Soc. Ent. Fr.* (1853) p. 379 ♂ ♀.
Savig. Descr. de l'Egypt. t. 11. f. 13 ♀.
Sauss. Mém. Soc. Phys. Genève, xiv. fasc. 1. 13.
Hab. Algeria.

7. PALARUS LEPIDUS.

Palarus lepidus, *Klug, Symb. Phys.* dec. v. t. 47. f. 3.
Hab. Egypt (Sakkara).

8. PALARUS AMBUSTUS.

Palarus ambustus, *Klug, Symb. Phys.* dec. v. t. 47. f. 6.
Hab. Egypt (Sakkara).

Genus 7. HELIORYCTES.

Head transverse, about the width of the thorax; eyes oval, converging at the vertex; the stemmata placed in a triangle to-

wards the vertex; antennæ short, subfiliform, slightly thickened in the middle, pointed at the apex; the scape short, thick and cylindrical; the first joint of the flagellum short, about half the length of the second, the rest of about equal length; mandibles arcuate, acute at their apex, not toothed within, with a dentate process beneath towards the base; the labrum concealed. Thorax rotundate, the collar narrow, transverse; the scutellum transverse, oblong-quadrate; the metathorax truncated, with a mucro at the sides and about the middle of the truncation; the superior wings with one marginal and three submarginal cells; the marginal cell elongate, rounded at the apex, and slightly appendiculated; the first submarginal cell elongate, twice the length of the second and third united; the second submarginal cell petiolated; the third oblique, of nearly equal width; the first recurrent nervure received by the first submarginal cell near its apex; the second recurrent nervure entering the second submarginal cell near its apex; the legs stout; the anterior tarsi cilated outside, the intermediate and posterior tibiæ spinose; the claws simple, having a pulvillus in their fork. Abdomen ovato-conic, truncated at the base, the apex acute.

1. Helioryctes melanopyrus. Pl. IX. fig. 3.

Female. Length 4 lines.—Head and thorax black, opake, finely and very closely punctured; the palpi pale rufo-testaceous, the mandibles ferruginous in the middle. Thorax: the metathorax above enclosed by a half-circular ridge, the enclosed space reticulated; wings dark fuscous, nearly black; the legs ferruginous, with the coxæ, trochanters, and base of the anterior femora behind, black; the posterior tibiæ incrassated towards their apex, roughened outside, and furnished with three rows of short acute spines; the intermediate tibiæ not roughened, but similarly armed to the posterior pair. Abdomen ferruginous, very closely and finely punctured, the two apical segments very smooth and shining, with a few scattered fine punctures; the sides of the apical segment carinated.

Hab. The Gambia. (Coll. F. Smith.)

Genus 8. GORYTES.

Sphex, pt., *Linn. Syst. Nat.* i. 941 (1766)
Vespa, pt., *Linn. Syst. Nat.* i. 948 (1766).
Crabro, pt., *Rossi, Faun. Etrus. App.* 123 (1790).
Mellinus, pt., *Fabr. Ent. Syst.* ii. 285 (1793).
Gorytes, *Latr. Hist. Nat.* xiii. 308 (1805).
Arpactus, *Jurine, Hym.* 194 (1807).

Hoplisus, *St. Farg. Ann. Soc. Ent. Fr.* i. 62 (1832).
Euspongus, *St. Farg. Ann. Soc. Ent. Fr.* i. 66 (1832).
Lestiphorus, *St. Farg. Ann. Soc. Ent. Fr.* i. 70 (1832).
Psammœcius, *St. Farg. Ann. Soc. Ent. Fr.* i. 72 (1832).
Agraptus, *Wesm. Hym. Foss. Belg.* 9.

1. GORYTES MYSTACEUS. B.M.

Sphex mystacea, *Linn. Faun. Suec.* 412. no. 1653 ♂; *Syst. Nat.* i. 944. 21, & *Cab. Mus. Linn. Soc.*
Villers, Ent. iii. 231. 32.
Christ. Hym. 270.
Vespa campestris, *Linn. Faun. Suec.* 417. no. 1677 ♀; *Syst. Nat.* i. 950. 13, & *Cab. Mus. Linn. Soc.*
Fabr. Syst. Ent. 369. 31.
Rossi, Faun. Etrus. ii. 88. 873.
Christ. Hym. 234.
Oliv. Encycl. Méth. vi. 689. 96.
Mellinus mystaceus, *Fabr. Ent. Syst.* ii. 285. 1.
Panz. Faun. Germ. 53. 11.
Mellinus campestris, *Fabr. Ent. Syst.* ii. 287. 6; *Syst. Piez.* 299. 9.
Arpactus campestris, *Panz. Krit. Revis.* ii. 165.
Arpactus mystaceus, *Jurine, Hym.* 194.
Gorytes mystaceus, *Latr. Gen. Crust. et Ins.* iv. 89.
Illig. ed. Faun. Etrus. ii. 144. 873.
Van d. Lind, Obs. ii. 94. 9.
Shuck. Foss. Hym. 211. 1.
Dahlb. Hym. Europ. i. 166. 98.
St. Farg. Hym. iii. 55. 1. t. 25. f. 8 ♀.
Wesm. Hym. Foss. Belg. 85. 1.

Hab. Britain; Italy; France; Germany; Belgium; Norway; N. America.

2. GORYTES QUADRIFASCIATUS. B.M.

Mellinus quadrifasciatus, *Fabr. Syst. Piez.* 298. 5 ♂.
Gorytes 4-fasciatus, *Latr. Gen. Crust. et Ins.* iv. 89.
Van d. Lind, Obs. ii. 96. 10 ♂ ♀.
Shuck. Foss. Hym. 215. 3.
Wesm. Not. Gor. Bull. Acad. Brux. vi. 10. 4.
Gorytes dissectus, *Panz. Faun. Germ.* 80. 18?
Gorytes arenarius, *Van d. Lind, Obs.* ii. 97. 11 ♂.
Euspongus vicinus, *St. Farg. Ann. Soc. Ent. Fr.* i. 68. 2 (1832).
Gorytes libitinarius, *Curtis, Brit. Ent.* xi. 524.
Hoplisus quadrifasciatus, *Dahlb. Hym. Eur.* i. 159. 91.
Wesm. Hym. Foss. Belg. 86. 1.

Hab. Britain; France; Germany; Belgium.

3. GORYTES FARGEII. B.M.

Gorytes campestris, *St. Farg. Ann. Soc. Ent. Fr.* i. 58. 2 (1832).
Wesm. Not. Gor. Bull. Acad. Brux. vi. 5. 2, & *Hym. Foss. Belg.* 85. 2.
Mellinus quadrifasciatus, *Panz. Faun. Germ.* 98. 17 (*nec* synon.).
Gorytes Fargeii, *Shuck. Foss. Hym.* 214. 2.

Hab. Britain; France; Germany; Belgium; Scandinavia.

4. GORYTES LATICINCTUS. B.M.

Euspongus laticinctus, *St. Farg. Ann. Soc. Ent. Fr.* i. 66. 1 (1832).
Gorytes laticinctus, *Shuck. Foss. Hym.* 217. 4.
Wesm. Not. Gor. Bull. Acad. Brux. vi. 11. 5.
Hoplisus laticinctus, *Dahlb. Hym. Europ.* 161. 92?
Wesm. Hym. Foss. Belg. 86. 2.

Hab. Britain; France; Germany; Belgium.

5. GORYTES BICINCTUS. B.M.

Crabro bicinctus, *Rossi, Faun. Etrus. App.* 123. 110.
Gorytes bicinctus, *Van d. Lind, Obs.* ii. 93. 7.
Curtis, Brit. Ins. ii. fol. 524. t. 524.
Shuck. Foss. Hym. 219. 5.
Wesm. Not. Gor. Bull. Acad. Brux. vi. 11. 6.
Lestiphorus bicinctus, *St. Farg. Ann. Soc. Ent. Fr.* i. 70. 1 (1832).
Dahlb. Hym. Europ. i. 156. 90.
Wesm. Hym. Foss. Belg. 94. 1.

Hab. Britain; France; Italy; Germany; Belgium.

6. GORYTES QUINQUECINCTUS. B.M.

Mellinus 5-cinctus, *Fabr. Ent. Syst.* ii. 287. 7; *Syst. Piez.* 299. 11.
Panz. Faun. Germ. 72. 14.
Hoplisus quinquecinctus, *Wesm. Not. Gor. Bull. Acad. Brux.* vi. 10. 3, & *Hym. Foss. Belg.* 89. 4.
Dahlb. Hym. Europ. i. 162. 91.
St. Farg. Hym. iii. 60. 1.

Hab. France; Germany; Belgium.

This is very distinct from examples of *G. 4-cinctus* (var. with five yellow bands); the scape and three or four of the basal joints of the flagellum are yellow beneath, and much more slender than in *G. 4-cinctus*; the femora are yellow, with a black stripe above.

7. GORYTES ALBILABRIS.

Euspongus albilabris, *St. Farg. Hym.* iii. 71. 3.

Hab. France (Bordeaux).

8. GORYTES LACORDAIREI.

Hoplisus Lacordairei, *St. Farg. Ann. Soc. Ent. Fr.* ii. 64. 2 (1833); *Hym.* iii. 64. 2.

Hab. France.

9. GORYTES PUNCTULATUS. B.M.

Psammæcius punctulatus, *St. Farg. Ann. Soc. Ent. Fr.* i. 721 (1832); *Hym.* iii. 75. 1.
Gorytes punctulatus, *Van d. Lind, Obs.* ii. 100. 14?
Hoplisus latifrons, *Dahlb. Hym. Europ.* i. 164. 96?

Hab. France (Paris).

10. GORYTES ALBIDULUS.

Hoplisus albidulus, *St. Farg. Ann. Soc. Ent. Fr.* i. 65. 3 ♀ (1832); *Hym.* iii. 65. 3.
Dahlb. Hym. Europ. i. *synop. spec.* 482. 2.

Hab. France (Paris).

11. GORYTES PULCHELLUS.

Hoplisus pulchellus, *Wesm. Hym. Foss. Belg.* 90. 5.

Hab. Belgium.

12. GORYTES PLANIFRONS.

Hoplisus planifrons, *Wesm. Hym. Foss. Belg.* 87. 3.

Hab. Belgium.

13. GORYTES ELEGANS.

Female. Length 4½ lines.—Black: the face opake, the vertex slightly shining and delicately punctured; a minute spot on each side of the clypeus, another on the inner orbit of the eyes, and a spot on the scape in front, pale yellow; the palpi pale rufo-testaceous; the mesothorax and scutellum smooth and shining; the metathorax coarsely rugose, the enclosed space at the base of the metathorax divergently rugose-striate; the collar, a spot beneath the wings, and a transverse one on the scutellum, yellow; the wings hyaline, with a faint fuscous cloud occupying the marginal cell; the nervures and tegulæ pale rufo-testaceous;

the legs ferruginous; the coxæ, trochanters, and base of the anterior femora, black. Abdomen with fine pale yellow bands, that on the basal segment interrupted, the spots pointed within; beneath, impunctate.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

This species very closely approaches the *Hoplisus albidulus*, but St. Fargeau describes the scutellum as being immaculate.

14. GORYTES CONCINNUS. B.M.

Sphex concinna, *Rossi, Faun. Etrus. (ed. Illig.)* ii. 825. t. 6. f. 5.
Gorytes concinnus, *Van d. Lind, Obs.* ii. 92. 3.
Harpactes concinnus, *Dahlb. Hym. Europ.* i. 149. 81.
Agraptus concinnus, *Wesm. Hym. Foss. Belg.* 9.

Hab. Italy (Florence).

15. GORYTES IRIDIPENNIS.

Female. Length 3 lines.—Black: the scape in front, the clypeus, labrum, mandibles and palpi, of a testaceous yellow; the tips of the mandibles ferruginous; the flagellum rufo-testaceous beneath. Thorax: the collar, tubercles, a spot beneath the wings, an epaulet over the tegulæ, the scutellum, post-scutellum, and an oblong-ovate macula on each side of the metathorax, yellow; the mesothorax with large scattered punctures; the suture at the base of the scutellum consute; at the base of the metathorax is an angular space longitudinally grooved, but not enclosed; on each side are a few scattered punctures; wings hyaline and splendidly iridescent, the marginal cell occupied by a fuscous cloud; the legs pale rufo-testaceous; the anterior tibiæ behind, and the intermediate and posterior tarsi, femora and tibiæ, slightly fuscous above. Abdomen: the basal segment with a broad yellow band on the apical margin, which is emarginate in the middle; the four following segments have a narrow yellow marginal fascia; the four apical segments coarsely punctured; the marginal fasciæ are continued beneath, the apical segment entirely yellow.

Hab. Brazil (Santarem). (Coll. W. W. Saunders, Esq.)

16. GORYTES SERICATUS. B.M.

Female. Length 4 lines.—Black, covered with a fine silky pile: the clypeus, scape in front, and the mandibles, yellow; tips of the latter ferruginous. Thorax smooth and slightly shining; the collar and posterior margin of the scutellum yellow; the suture at the base of the scutellum consute; the enclosed space

at the base of the scutellum elongate, forming half an oval, which is enclosed by a ridge; outside of the ridge a channel runs round the enclosed space, the channel transversely striated, the enclosure longitudinally grooved, forming eight sharp carinæ; the metathorax beyond the enclosure coarsely reticulated; the wings hyaline, with a faint cloud crossing the anterior pair at the base of the first submarginal cell; a cloud also occupies the marginal cell. Abdomen petiolated; a narrow yellow band on the apical margins of the second and three following segments; the apical segment reddish-yellow.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

17. GORYTES FUMIPENNIS. B.M.

Female. Length 5 lines.—Black: thinly covered with a fine sericeous pile, that on the face bright and silvery; the head and thorax impunctate; the scape, extreme apex of the antennæ, clypeus, labrum and palpi, yellow; an ovate dark macula in the middle of the clypeus, touching its anterior margin. Thorax: a minute spot on each side of the mesothorax, touching the tegulæ, a transverse stripe on the apical margin of the scutellum, and a large oblong-ovate macula on each side of the metathorax, yellow; the suture at the base of the scutellum consute; the anterior wings dark fuscous, but hyaline beyond the marginal and second submarginal cells; the posterior wings faintly coloured at their anterior margin; the legs yellow beneath, the anterior tarsi and third and fourth joints of the intermediate and posterior pairs entirely so; the coxæ and basal joint of the posterior tarsi black; the apical joint of the intermediate and posterior tarsi fuscous. Abdomen petiolated, the basal segment yellow, with a large subovate black macula in the middle, above; the second segment has a very narrow yellow fascia on its apical margin.

Hab. Brazil?

18. GORYTES TRISTRIGATUS.

Mellinus tristrigatus, *Fabr. Syst. Piez.* 299. 7.
Hoplisus Behni, *Dahlb. Hym. Europ.* i. 165. 97.
Hoplisus tristrigatus, *Dahlb. Hym. Europ.* i. *synop. spec.* 483. 6 ♂ ♀.

Hab. Brazil.

19. GORYTES BRASILIENSIS. B.M.

Gorytes Brasiliensis, *Shuck. Trans. Ent. Soc. Lond.* ii. 80 (1837–40).
Hoplisus seminiger, *Dahlb. Hym. Europ.* i. *synop. spec.* 483. 7 ♀.

Hab. Brazil.

20. GORYTES CAYENNENSIS.

Hoplisus Cayennensis, *Spin. Ann. Soc. Ent. Fr.* x. new ser. 116. 71 ♂ (1841).

Hab. Cayenne.

21. GORYTES VELUTINUS.

Hoplisus velutinus, *Spin. Gay's Chili*, vi. 338. 1.

Hab. Chili.

22. GORYTES PICTUS. B.M.

Female. Length 4 lines.—Head black; the antennæ and mandibles ferruginous, the scape slightly stained with yellow at the apex in front; an abbreviated line on the inner and outer orbits of the eyes, that at the inner orbit widest and not extending to the clypeus; the anterior margin of the clypeus black; the mandibles ferruginous, yellow at their base. Thorax: the mesothorax, and the metathorax at its sides, ferruginous; the scutellum, post-scutellum, enclosed portion at the base of the metathorax, and the entire thorax beneath, black; the collar, tubercles, and the hinder margin of the scutellum, yellow; the wings hyaline, with a dark fuscous spot which occupies the marginal, second submarginal, and half the third submarginal cells; the nervures and tegulæ ferruginous; a spot beneath the wings and the legs ferruginous; the anterior tarsi ciliated outside, their apical joint and the intermediate tibiæ yellow in front; the posterior femora have a fuscous stripe within, and the tibiæ and tarsi are fuscous above. The first segment of the abdomen ferruginous; the second segment has a narrow pale ferruginous marginal fascia in the middle of its posterior margin, which expands at the sides and occupies the entire lateral margins; the third and fourth segments pale ferruginous, except their extreme basal margins, which are black; beneath, the abdomen is black, with the apical margins of the segments narrowly rufo-piceous.

Hab. Madras. (Coll. Sir Walter Elliott.)

23. GORYTES NATALENSIS. Pl. XI. fig. 3. B.M.

Female. Length 7 lines.—Black: head slightly shining, the vertex covered with short fuscous down; the clypeus covered with thin silvery pubescence, its apical margin and the mandibles ferruginous; tips of the latter black; the scape yellow in front, the flagellum ferruginous beneath. Thorax: the collar, tubercles, lateral margins of the mesothorax, the tegulæ and scutellum,

obscurely ferruginous; the metathorax smooth and shining, and thinly covered with fuscous pile; the legs ferruginous, with the coxæ fuscous, except at their apex; the tibiæ and femora more or less fuscous above; the claw-joint of the anterior and intermediate tarsi, and the posterior pair, yellow, their extreme base fuscous; the anterior tarsi with long cilia exteriorly; all the tibiæ spinose; wings slightly coloured, with a dark fuscous cloud occupying the marginal cell and extending over the upper half of the second and third submarginal cells, and passing beyond to the apex of the wing; a fuscous spot at the apex of the externo-medial cell. Abdomen petiolated, smooth and shining, the second segment yellow, the apical segment ferruginous, the superior surface flat, the lateral margins raised, the surface punctured, the apex produced into an elongate style.

Hab. Port Natal. (Coll. Mr. Plant.)

24. GORYTES TARSATUS. B.M.

Male. Length 4 lines.—Black: the apex of the scape and the basal joint of the flagellum yellow in front; an abbreviated yellow line on the inner orbit of the eyes, in the middle; the apical joint of the flagellum slightly bent; the face thinly covered with a fine sericeous pile; the head closely punctured. Thorax coarsely punctured; the scutellum and post-scutellum coarsely rugoso-striate; the metathorax coarsely rugose, the enclosed space at the base with coarse divergent striæ; the collar with an orange-yellow spot on each side; the anterior wings with a dark fuscous cloud along their anterior margins; the anterior tibiæ and tarsi of a reddish-yellow, the former with a dark stain behind; the tarsi are also darkest above; the intermediate and posterior tarsi pale yellow, nearly white, the apex of the joints black, as well as the claw-joint of all the tarsi. Abdomen punctured, the first, second and third segments with an orange-yellow marginal fascia; the first two widest and notched in the middle; the apex rounded, with the margin ferruginous; beneath, the second segment is shining, and has a number of large scattered punctures; the following segments finely punctured at their base and coarsely so on their apical margins.

Hab. Adelaide.

25. GORYTES CARBONARIUS. B.M.

Female. Length 4½ lines.—Jet-black, shining and delicately punctured: the face, cheeks, sides of the thorax and base of the abdomen with a thin black pubescence. The anterior tarsi ciliated; the mesothorax has an abbreviated slightly impressed

line in the centre of its anterior margin, and a similar one on each side; an impressed line on each side over the tegulæ; the suture at the scutellum consute; the metathorax smooth; the enclosed space at the base of the metathorax with a central abbreviated impressed line at the base; wings smoky-hyaline, the nervures black. Abdomen: the margins of the segments slightly depressed; beneath, the second segment abruptly produced at the base.

The male only differs in having the antennæ longer and the abdomen more strongly punctured.

Hab. New Zealand.

26. GORYTES BIPUNCTATUS.

Gorytes bipunctatus, *Say, Narr. Exped. St. Peter's River*, p. 72. *Dahlb. Hym. Europ.* i. 157.

Hab. Pennsylvania; South Carolina.

27. GORYTES FULVIPENNIS.

Female. Length 4½ lines.—Black, smooth and shining: the clypeus, labrum, mandibles, an abbreviated line at the inner orbit of the eyes, and the scape in front, yellow; the tips of the mandibles and the antennæ ferruginous; the flagellum fuscous towards the apex above, excepting the apical joint. Thorax: the collar, tubercles, a spot beneath the wings, the hinder margin of the scutellum, and an ovate spot on each side of the metathorax close to the insertion of the abdomen, yellow; wings fulvous, with a fuscous cloud in the marginal cell, the nervures and tegulæ ferruginous; the legs ferruginous; the coxæ, trochanters and base of the femora black, the apex of the two former ferruginous. Abdomen: the apical margins of the segments with a narrow yellow fascia, and the apical segment yellow.

Hab. N. America (United States). (Coll. W. W. Saunders, Esq.)

28. GORYTES SIMILLIMUS. B.M.

Female. Length 5 lines.—Black: the head shining, delicately punctured, and with larger scattered punctures; the scape in front, four or five of the basal joints of the flagellum, the clypeus, and a line on the inner orbit of the eyes, yellow. Thorax: the collar, tubercles, hinder margin of the scutellum, and a small ovate spot on each side of the metathorax, yellow; the disk smooth and shining, with four abbreviated lines at its anterior margin; the suture at the base of the scutellum consute; the enclosed portion at the base of the metathorax striated at the base and smooth towards the apex; a deep channel runs

from the base to the apex of the metathorax; the wings fuscohyaline, palest at their apex, with a dark fuscous cloud occupying the marginal cell; the tibiæ, tarsi, and tips of the femora, yellow; the tibiæ behind and the posterior tarsi above, rufofuscous. Abdomen smooth and shining; a narrow yellow fascia on the posterior margin of each segment; a single style or process at the apex of the abdomen.

Hab. Nova Scotia. (Coll. Lieut. Redman.)

This species at first sight closely resembles the *G. 4-cinctus* of Europe.

29. GORYTES NIGRIFRONS. B.M.

Female. Length 4½ lines.—Black: the head finely and closely punctured, the face with a thin silvery pubescence; the clypeus coarsely punctured, and having two minute yellow spots at the base; the scape yellow in front, and three or four of the basal joints of the flagellum of a reddish-yellow beneath; the apical half of the mandibles ferruginous. Thorax subopake and very closely punctured; the collar, tubercles, a spot beneath the wings, a stripe over the tegulæ, and the post-scutellum, yellow; wings subhyaline, the marginal cell occupied by a dark fuscous cloud, which does not extend beyond it; the tibiæ and tarsi yellow, the tibiæ with a ferruginous stain behind; the claw-joint of the tarsi, the femora and coxæ dark rufo-piceous; the calcaria and claws pale. Abdomen shining and very finely punctured, covered with a fine sericeous pile, very brilliant in certain lights; the three basal segments with a yellow marginal fascia, the first widest, slightly notched in the middle and widened laterally; beneath, black and covered with a short griseous pubescence; the second segment with some scattered large deep punctures.

Hab. Nova Scotia. (Coll. Lieut. Redman.)

30. GORYTES PLACIDUS.

Female. Length 3½ lines.—Black, shining and strongly punctured: the antennæ, clypeus, inner orbit of the eyes, labrum, mandibles and palpi, orange-red; tips of the mandibles rufopiceous; the flagellum with the fourth and following joints fuscous above. Thorax: the collar, tubercles, an irregular-shaped spot beneath the wings, the sides of the disk of the mesothorax, the scutellum and metathorax, orange-red; the enclosed space at the base of the metathorax black and longitudinally grooved; the suture at the base of the scutellum consute; the anterior wings with a dark fuscous cloud extending from the base to their apex, and occupying more than half the width of the wings,

their posterior margin, as well as the posterior wings, subhyaline; the legs orange-red. Abdomen: the basal segment and posterior margin of the second segment orange-red, the latter widely emarginate at its anterior margin; the three apical segments very coarsely punctured.

The male differs in having the flagellum fuscous except the basal joint; the clypeus and inner orbit of the eyes yellow.

Hab. East Florida. (Coll. F. Smith.)

31. GORYTES RUFIPES. B.M.

Female. Length 4 lines. — Black: the head and thorax strongly punctured; the scape, flagellum beneath, and three or four of the basal joints entirely, the anterior margin of the clypeus, a line on the inner orbit of the eyes, the labrum, mandibles and palpi, reddish-yellow, varying in different specimens. Thorax: the collar, tubercles, a spot beneath the wings, the lateral margins of the mesothorax and the scutellum, reddish-yellow; the metathorax and legs ferruginous, the enclosed portion at the base of the former black and longitudinally striated; the anterior wings with a broad fuscous cloud extending from the base to their apex, their posterior margin subhyaline, as well as the posterior wings. Abdomen shining and strongly punctured, the apical segments coarsely so; the basal segment ferruginous, its posterior margin, as well as that of the second, and sometimes of the two following segments, with an orange-yellow fascia; the first two bands widest, the second slightly emarginate in the middle; beneath black, the second segment with scattered large deep punctures; the following segments are smooth at their basal and punctured at their apical margins. Some examples have only two bands on the abdomen.

Hab. East Florida (St. John's Bluff). (Coll. E. Doubleday, Esq.)

32. GORYTES APICALIS. B.M.

Male. Length 5 lines.—Black, smooth and shining: six or seven of the basal joints of the antennæ ferruginous; the scape in front, the clypeus, face on each side, a narrow line at the inner orbit of the eyes, not reaching their vertex, the labrum, mandibles and palpi, sulphur-yellow; the tips of the mandibles ferruginous. Thorax: the collar, tubercles, an irregularly-shaped large spot beneath the wings, an epaulet over the tegulæ, the scutellum, post-scutellum, and a large subovate macula on each side of the metathorax, yellow; the suture at the base of the scutellum smooth; the anterior legs yellow, the intermediate and posterior pairs pale ferruginous; the base of the coxæ black;

the wings brown, with the apex of the anterior pair hyaline. Abdomen: the apical margin of the segments with a broad yellow fascia which is continued beneath; that on the first segment has a small notch in the middle, and the two following are slightly attenuated in the middle; beneath, the bands are much dilated at the sides.

Hab. Georgia.

33. GORYTES DIVISUS. B.M.

Male. Length 4 lines.—Black: the head shining, with scattered punctures; the antennæ, clypeus, sides of the face, labrum, mandibles and palpi, of a reddish-yellow. Thorax shining, the collar, tubercles, a spot beneath the wings, and the posterior margin of the scutellum, yellow; the wings fusco-hyaline, darkest in the marginal cell, the nervures and tegulæ rufo-testaceous; the legs ferruginous, the tarsi yellowish; the suture at the base of the scutellum smooth. Abdomen: the first two segments smooth and shining, the five apical segments subopake and strongly punctured, the whole covered with a fine sericeous pile; the second segment much swollen, very convex; the first and second segments have a broad fascia on their apical margins, of a bright yellow, more or less suffused with ferruginous; the third and fourth segments have a narrow slightly interrupted fascia on their apical margins, the apex furnished with a single tooth or minute spine.

Hab. Georgia.

Genus 9. HARPACTUS.

Mutilla, pt., *Latr. Act. Soc. Nat. Par.* i. 11 (1792).
Sphex, pt., *Fabr. Ent. Syst. Supp.* 243 (1798).
Evania, pt., *Fabr. Ent. Syst. Supp.* 241 (1798).
Ceropales, pt., *Fabr. Syst. Piez.* 185 (1804).
Pompilus, pt., *Fabr. Syst. Piez.* 187 (1804).
Mellinus, pt., *Latr. Hist. Nat.* xiii. 318 (1804).
Arpactus, *Jurine, Hym.* 192 (1807).
Larra, pt., *Dahlb. Exercit. Hym.* 51 (1833).
Harpactus, *Shuck. Foss. Hym.* 221 (1837).

1. HARPACTUS LÆVIS. B.M.

Mutilla lævis, *Latr. Act. Soc. Nat. Par.* i. 11. 12.
Sphex cruenta, *Fabr. Ent. Syst. Supp.* 244. 54–55.
Evania ruficollis, *Fabr. Ent. Syst. Supp.* 241. 3–4?
Ceropales ruficollis, *Fabr. Syst. Piez.* 186. 6?

Pompilus cruentus, *Fabr. Syst. Piez.* 192. 20.
Panz. Faun. Germ. 84. 20.
Coqueb. Illustr. i. 23. t. 5. f. 10.
Mellinus cruentatus, *Latr. Hist. Nat.* xiii. 318. 1.
Gorytes lævis, *Van d. Lind, Obs.* ii. 91. 1.
Arpactus lævis, *St. Farg. Ann. Soc. Ent. Fr.* i. 74. 1 (1832); *Hym.* iii. 79. 1.
Shuck. Foss. Hym. 221. 1.
Dahlb. Hym. Europ. i. 148. 79.

Hab. Britain?; France; Germany; Belgium.

2. HARPACTUS TUMIDUS. B.M.

Pompilus tumidus, *Panz. Faun. Germ.* 81. 15 ♂.
Mellinus tumidus, *Panz. Krit. Revis.* ii. 169.
Arpactus tumidus, *Jurine, Hym.* 194.
St. Farg. Ann. Soc. Ent. Fr. i. 77. 3.
Shuck. Foss. Hym. 222. 2.
Dahlb. Hym. Europ. i. 149. 80.
St. Farg. Hym. iii. 82. 3.
Wesm. Hym. Foss. Belg. 95. 2.
Larra tumida, *Dahlb. Exercit. Hym.* 51. 3.

Hab. Britain; France; Germany; Belgium; Sweden.

3. HARPACTUS LUNATUS.

Gorytes lævis, *Van d. Lind, Obs.* ii. 91. 1. var. β.
Larra lunata, *Dahlb. Exercit. Hym.* 52. 4.
Harpactes lunatus, *Dahlb. Hym. Europ.* i. 147. 78.
Arpactus lunatus, *Wesm. Hym. Foss. Belg.* 95. 1.

Hab. Germany; Belgium; Norway; Finland (Helsingfors). (Coll. F. Smith.)

4. HARPACTUS FORMOSUS.

Arpactus formosus, *Jurine, Hym.* t. 10. f. 20.
St. Farg. Ann. Soc. Ent. Fr. i. 75. 2.
Harpactes formosus, *Dahlb. Hym. Europ.* i. 149. 80.

Hab. France; Germany.

5. HARPACTUS ORNATUS.

Female. Length 2½ lines.—The head black, with the scape in front, the clypeus, inner orbit of the eyes, labrum, palpi and mandibles, yellow; tips of the latter ferruginous; the hinder margin of the vertex and upper portion of the inner orbit of the eyes ferruginous. Thorax red, with a black stain on the pectus;

the legs rufo-piceous, more or less fuscous above; the wings hyaline, with a faint cloud crossing the anterior wings towards their apex. Abdomen shining black; the basal segment smooth, the second punctured, and having on each side a large subovate white macula, the maculæ connected by a narrow band on the apical margin of the segment; the fifth segment white.

Hab. Northern India. (Coll. F. Smith.)

This species very closely resembles the European *H. formosus*, but it differs in having a red prothorax and vertex, the metathorax is much more coarsely rugose, and the thorax shorter and broader altogether.

6. HARPACTUS AFFINIS.

Harpactes affinis, *Dahlb. Hym. Europ.* i. 150. 83.

Hab. Italy.

7. HARPACTUS ELEGANS.

Arpactus elegans, *St. Farg. Hym. Ann. Soc. Ent. Fr.* i. 79. 5 (1832); *Hym.* iii. 84. 5.

Hab. France.

8. HARPACTUS CARCELI.

Gorytes Carceli, *St. Farg. Ann. Soc. Ent. Fr.* i. 78. 4 ♂ (1832); *Hym.* iii. 83. 4.
Dahlb. Hym. Europ. i. 151. 84.

Hab. France; Germany.

9. HARPACTUS LARROIDES.

Arpactus larroides, *Spin. Gay's Chili*, vi. 341. 2.

Hab. Chili.

10. HARPACTUS GAYI.

Arpactus Gayi, *Spin. Gay's Chili*, vi. 340. 1.

Hab. Chili.

Genus 10. ALYSON.

Sphex, pt., *Panz. Faun. Germ.* fasc. 51.
Alyson, *Jurine, Hym.* 196 (1807).

1. ALYSON SPINOSUS. B.M.

Alyson spinosus, *Jurine, Hym.* 196. t. 10. f. 21 ♀.

Alyson spinosus, *St. Farg. & Serv. Encycl. Méth.* x. 50. 4.
Van d. Lind, Obs. ii. 89. 3.
St. Farg. Hym. iii. 87. 2.
Alyson bimaculatus, *Dahlb. Hym. Europ.* i. 146 (var.) & 474.
Wesm. Hym. Foss. Belg. 99. 2 (var.?).

Hab. France; Germany.

The examples of this species in the Collection of the British Museum are very distinct from those of *A. bimaculatus*; the sculpture of the metathorax is very different, and the females have a white scutellum.

2. ALYSON TRICOLOR. B.M.

Alyson tricolor, *St. Farg. & Serv. Encycl. Méth.* x. 50. 4.
Van d. Lind, Obs. ii. 90. 4.
St. Farg. Hym. iii. 89. 5.
Wesm. Hym. Foss. Belg. 98. 1.

Hab. France; Germany; Belgium.

3. ALYSON BIMACULATUS. B.M.

Sphex fuscata, *Panz. Faun. Germ.* 51. 3.
Alyson bimaculatus, *Jurine, Hym.* 196.
Panz. Krit. Revis. ii. 170.
Van d. Lind, Obs. ii. 88. 2.
Dahlb. Hym. Europ. i. 142. 76 & 474.
St. Farg. Hym. iii. 88. 3 ♀.
Wesm. Hym. Foss. Belg. 99. 2.
Alyson fuscatus, *Panz. Krit. Revis.* ii. 171.
St. Farg. Hym. iii. 58. 4.

Hab. France; Germany; Belgium.

4. ALYSON MELLEUS.

Alyson melleus, *Say, Bost. Journ.* i. 380. 2.

Hab. N. America (Indiana).

5. ALYSON OPPOSITUS.

Alyson oppositus, *Say, Bost. Journ.* i. 380. 1.

Hab. N. America (Indiana).

Genus 11. DIDINEIS.

Pompilus, pt., *Fabr. Ent. Syst. Supp.* 249 (1798).
Alyson, pt., *Latr. Gen. Crust. et Ins.* iv. 86 (1809).
Didineis, *Wesm. Hym. Foss. Belg.* 96.

1. DIDINEIS LUNICORNIS. B.M.

Pompilus lunicornis, *Fabr. Ent. Syst. Supp.* 249. 21; *Syst. Piez.* 194. 32 ♂.
Alyson lunicornis, *Latr. Gen. Crust. et Ins.* iv. 86.
St. Farg. & Serv. Encycl. Méth. x. 50. 1.
Van d. Lind, Obs. ii. 88. 1.
Shuck. Foss. Hym. 207. 1 ♂ ♀.
Dahlb. Hym. Europ. i. 142. 75 & 474.
St. Farg. Hym. iii. 86. 1.
Alyson Kennedii, *Curtis, Brit. Ent.* xiii. fol. & tab. 584 ♀.
Didineis lunicornis, *Wesm. Hym. Foss. Belg.* 97. 1.

Hab. Britain; France; Germany; Belgium.

M. Wesmael has separated this species from the others in the genus *Alyson* in consequence of the neuration of the anterior wings being different, and the intermediate tibiæ being armed with only one spur at the apex.

Genus 12. MELLINUS.

Vespa, pt., *Linn. Faun. Suec.* 418 (1761).
Crabro, pt., *Fabr. Mant.* i. 294 (1787).
Mellinus, pt., *Fabr. Ent. Syst.* ii. 285 (1793).

1. MELLINUS ARVENSIS. B.M.

Sphex vaga, *Linn. Faun. Suec.* 414. no. 1664? (type in *Cab. Mus. Linn. Soc.*?).
Scop. Ent. Carn. 785. fig. 785.
Vespa arvensis, *Linn. Faun. Suec.* 418. no. 1678 (and *Cab. Mus. Linn. Soc.*).
De Geer, Ins. ii. 2. 820. 3.
Schrank, Ins. Austr. 392. 791.
Fabr. Mant. i. 291. 49.
Christ. Hym. 234.
Vespa superbus, *Harris, Expos. Eng. Ins.* 227. 3. t. 37. f. 3.
Crabro bipunctatus, *Fabr. Mant.* i. 296. 18.
Oliv. Encycl. Méth. vi. 516. 20,
Crabro U-flavum, *Panz. Faun. Germ.* 17. 20.
Mellinus bipunctatus, *Fabr. Ent. Syst.* ii. 286. 4; *Syst. Piez.* 298. 6.
Mellinus arvensis, *Fabr. Ent. Syst.* ii. 287. 7 ♀; *Syst. Piez.* 299. 10.
Latr. Hist. Nat. xiii. 319. 3.
Van d. Lind, Obs. ii. 84. 1 ♂ ♀.
Shuck. Foss. Hym. 203. 1.

Mellinus arvensis, *Zett. Ins. Lapp.* 440. 1.
Dahlb. Hym. Europ. i. 226. 131.
St. Farg. Hym. iii. 91. 1.
Wesm. Hym. Foss. Belg. 96. 1.

Hab. Britain and throughout Europe.

The *Sphex vaga* of the Linnæan Cabinet is the male of *M. arvensis*, but it does not agree with the description in the *Fauna Suecica*; in the Cabinet are also specimens of the *Crabro vagus* of Fabricius, and in all probability the label has at some time fallen off the pin and been attached to the wrong insect; the name given by Linnæus to the female is therefore retained; there can be little doubt of the *Sphex vaga* being identical with the *Crabro vagus*, the description in the *Fauna Suecica* exactly suiting that insect.

2. MELLINUS SABULOSUS. B.M.

Crabro sabulosus, *Fabr. Mant.* i. 296. 17.
Oliv. Encycl. Méth. vi. 515. 19 ♂.
Crabro frontalis, *Panz. Faun. Germ.* 46. 11 ♂.
Crabro petiolatus, *Panz. Faun. Germ.* 46. 12 ♀.
Mellinus sabulosus, *Fabr. Ent. Syst.* ii. 286. 2.
Van d. Lind, Obs. ii. 87. 3.
Shuck. Foss. Hym. 205. 2.
Dahlb. Hym. Europ. i. 230. 133.
Curtis, Brit. Ent. xiii. fol. 180. tab. 180.
Wesm. Hym. Foss. Belg. 96. 2.
Mellinus ruficornis, *Fabr. Ent. Syst.* ii. 286. 3 ♀.
Panz. Faun. Germ. 77. 17.
Latr. Hist. Nat. xiii. 519. 4.
Mellinus fulvicornis, *Fabr. Syst. Piez.* 300. 13 ♂.
Panz. Faun. Germ. 98. 18.
Van d. Lind, Obs. ii. 86. 2.

Hab. Britain; France; Italy; Germany; Belgium; Sweden.

Fam. 7. CRABRONIDÆ.

Head usually very large; the labrum not projecting; the abdomen oval or elliptical, sometimes gradually clavate.

Crabronites, *Latr. Gen. Crust. et Ins.* iv. (1804).
Crabronida, *Leach, Edin. Encycl.* (1812).
Crabronidæ, *Leach, Edin. Encycl.* (1817).

Genus 1. TRYPOXYLON.

Sphex, pt., *Linn. Syst. Nat.* 941 (1766).
Trypoxylon, *Latr. Préc. Car. Ins.* (1796).
Apius, *Jurine, Hym.* 140 (1807).

1. TRYPOXYLON FIGULUS. B.M.

Sphex figulus, *Linn. Faun. Suec.* 1650; *Syst. Nat.* i. 942. 11.
Rossi, Faun. Etrus. ii. 61. 810.
Fabr. Ent. Syst. ii. 203. 19.
Schrank, Faun. Boic. ii. 322. 2160.
Christ. Hym. 291.
Panz. Faun. Germ. 80. 16.
Sphex fuliginosa, *Scop. Ent. Cárn.* 711.
Rossi, Faun. Etrus. 63. 817.
Sphex leucostoma, *Schrank, Ins. Austr.* 771.
Illig. ed. Faun. Etrus. ii. 63. 817.
Trypoxylon figulus, *Latr. Hist. Nat.* xiii. 330.
Fabr. Syst. Piez. 181. 2.
Illig. ed. Faun. Etrus. 93. 810.
Spin. Ins. Ligur. i. 65. 1.
Shuck. Foss. Hym. 114. 1.
Van d. Lind, Obs. ii. 40. 1.
Zett. Ins. Lapp. 445. 1.
Dahlb. Dispos. Meth. Spec. Hym. 13. 82; *Hym. Europ.* i. 280 & 509. 2.
Guér. Icon. Règ. Anim. t. 71. f. 3.
St. Farg. Hym. iii. 228. 2.
Wesm. Hym. Foss. Belg. 106. 1.
Apius figulus, *Jurine, Hym.* 140. t. 9. gen. 8.

Hab. Britain; Italy; France; Germany; Belgium; Sweden; Finland; Lapland.

2. TRYPOXYLON CLAVICERUM. B.M.

Trypoxylon clavicerum, *St. Farg. & Serv. Encycl. Méth.* x. 750. 1.
Shuck. Foss. Hym. 118. 3.
Dahlb. Hym. Europ. i. 279. 175.
Wesm. Hym. Foss. Belg. 107. 2.
Trypoxylon tibiale, *Zett. Ins. Lapp.* 466.

Hab. Britain; France; Germany; Belgium; Sweden; Lapland.

3. TRYPOXYLON ATTENUATUM. B.M.

Trypoxylon attenuata, *Smith, Cat. Brit. Hym. Append.* 120.

Hab. Britain (Bristol).

4. TRYPOXYLON ALBIPES.

Female. Length 4½ lines.—Black: the face covered with bright silvery pubescence; the mandibles and palpi pale testaceous; the cheeks have a silvery pubescence. Thorax thinly covered with a scattered silvery-white pubescence, which is most dense and glittering at the apex of the metathorax, on the pectus and anterior coxæ; the mesothorax and scutellum smooth and shining; at the base of the metathorax is an enclosed space, which is coarsely reticulated and has a deep central channel; on each side of the enclosed space it is transversely sulcate; wings hyaline and splendidly iridescent, the tegulæ pale testaceous; the base and extreme apex of the tibiæ pale rufo-testaceous; the tarsi white, with the apical joints slightly ferruginous. Abdomen elongate; the first two segments as long as the thorax, the basal segment slender; a fine silky short silvery-white pubescence entirely covers the abdomen, very bright in certain lights, particularly on the sides.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

5. TRYPOXYLON PILEATUM.

Female. Length 4 lines.—Black: the clypeus covered with silvery pubescence; the face above the insertion of the antennæ produced into a shield-shaped form, rounded towards the vertex and triangular in front; from the lateral angles an acute edge runs into the emargination of the eyes, on each side of which is a smooth oblique plane. The mesothorax and scutellum smooth and shining; the metathorax enclosed at the base, the enclosure with coarse divergent striæ; from the apex of the enclosure an impressed channel runs downwards to the insertion of the abdomen; on each side of the channel it is delicately transversely striated and thinly covered with glittering silvery-white pubescence; the wings hyaline and beautifully iridescent. Abdomen shining, the margins of the three basal segments slightly constricted.

Hab. Madras. (Walter Elliott, Esq.)

6. TRYPOXYLON BICOLOR. B.M.

Female. Length 7 lines.—Head and thorax black; the head thinly covered with scattered cinereous pubescence; the face with bright silvery pile; the mandibles rufo-piceous, the palpi pale testaceous. Thorax thinly covered with hoary pubescence; the metathorax above with a slightly impressed central channel, subinterrupted at the verge of the oblique truncated portion, beyond which it is much broader and more deeply impressed and

is continued downwards to the insertion of the abdomen; the wings hyaline and iridescent, the tegulæ pale testaceous; the anterior tibiæ in front, the tarsi, and also the tips of the intermediate and posterior tibiæ, the knees and tips of the joints of the tarsi, pale rufo-testaceous; the calcaria pale testaceous; in some examples the tips of the coxæ, the trochanters, and the tips of the other joints are pale testaceous. Abdomen petiolated; the first segment very slender and black, the apex swollen and ferruginous, as well as the three following segments, these segments frequently more or less fuscous above, the three apical segments black.

Hab. Singapore; Java.

7. TRYPOXYLON ELONGATUM. B.M.

Male. Length 3 lines.—Black: head rugose, the clypeus with silvery pubescence; the tips of the mandibles and the palpi pale testaceous. The mesothorax and scutellum shining; the metathorax transversely rugose, with a deep central longitudinal channel and two oblique ones at the base which unite with the central one and form an enclosed space; the wings hyaline, with their apical margins clouded; the anterior tarsi and apical joints of the intermediate and posterior pairs testaceous. Abdomen elongate, smooth and shining; the basal segment as long as the thorax.

Hab. Sierra Leone.

8. TRYPOXYLON FRONTALE.

Female. Length 3 lines.—Black: head subquadrate, very closely and finely punctured; the mandibles pale rufo-testaceous; the front produced into an angular prominence between the antennæ, the apex acute; a slightly impressed line runs from the anterior stemma to the angular point. The posterior margin of the prothorax and the tegulæ, the anterior tibiæ in front, and the tarsi, pale testaceous; the mesothorax and scutellum very closely and finely punctured; the wings hyaline and splendidly iridescent; the metathorax transversely striated; at the base is an enclosed space which is obliquely striated, with a deep longitudinal channel, slightly interrupted at the verge of the oblique truncation. Abdomen smooth and shining, covered with a fine cinereous pile.

Hab. Africa. (Coll. F. Smith.)

9. TRYPOXYLON RUFIMANUM.

Trypoxylon rufimanum, *Spin. Mem. Accad. Torino*, xiii. 59. 42 (1853).

Hab. Brazil (Para).

10. TRYPOXYLON ANNULARE.

Trypoxylon annulare, *Dahlb. Hym. Europ.* i. 282.

Hab. Brazil.

11. TRYPOXYLON AURIFRONS. B.M.

Trypoxylon aurifrons, *Shuck. Foss. Hym.* 117. 2.
Dahlb. Hym. Europ. i. 285.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

12. TRYPOXYLON FUGAX. B.M.

Trypoxylon fugax, *Fabr. Syst. Piez.* 182. 4.
Dahlb. Hym. Europ. 281.

Hab. Brazil.

13. TRYPOXYLON FUSCIPENNE. B.M.

Trypoxylon fuscipennis, *Fabr. Syst. Piez.* 181. 3.
Trypoxylon fuscipenne, *Dahlb. Hym. Europ.* i. 283.

Hab. Brazil.

14. TRYPOXYLON ALBITARSE. B.M.

Trypoxylon albitarse, *Fabr. Syst. Piez.* 180. 1.
St. Farg. & Serv. Encycl. Meth. x. 750.
Dahlb. Hym. Europ. i. 286.
St. Farg. Hym. iii. 228. 1. t. 27. f. 3.
Trypoxylon politum, *Say, Bost. Journ.* i. 373. 1.

Hab. Brazil (Para); California; United States.

15. TRYPOXYLON NITIDUM.

Female. Length 4½ lines.—Black: the face covered with silvery pubescence; the mandibles and palpi rufo-testaceous. Thorax: above shining; the mesothorax rather strongly but not closely punctured; the metathorax obliquely striated at the base, beyond which it is striated transversely, at the sides is a little silvery pubescence; the thorax beneath smooth, shining and punctured; wings hyaline, faintly clouded at their apex; the knees, apex of the femora and basal joint of the tarsi rufo-testaceous. Abdomen: the two basal segments very smooth and shining, the base of the second segment rufo-testaceous; the apical margins of the third, fourth and fifth segments narrowly testaceous.

Hab. Brazil. (Coll. F. Smith.)

16. TRYPOXYLON ORNATUM.

Female. Length 4 lines.—Black: the face clothed with golden pubescence, including the emargination of the eyes; the palpi and mandibles pale testaceous, the latter ferruginous at their apex; the cheeks have a thin golden pubescence. The posterior margin of the prothorax, the tubercles, an epaulet over the tegulæ, and a patch on each side of the post-scutellum, covered with golden pubescence; the mesothorax and scutellum shining, with scattered shallow punctures; the metathorax transversely striated; from the insertion of the abdomen a broad deep groove passes about half-way upwards, at its termination is a shallow subtriangular depression; the wings hyaline, their apical margins clouded, the nervures testaceous. Abdomen clavate, the base of the second segment rufo-testaceous.

Hab. Brazil. (Coll. F. Smith.)

This species closely resembles the *T. fugax* of Fabricius, but is at once distinguished by the sculpture of the metathorax; in *fugax* it is smooth, shining and convex.

17. TRYPOXYLON EXCAVATUM. B.M.

Female. Length 5 lines.—Black: the face covered with silvery pubescence; the mandibles rufo-piceous, palest at their base. Thorax: the sides, beneath the metathorax and legs, with a thin cinereous pubescence, at the sides of the metathorax it has a silvery brightness; the mesothorax and scutellum very smooth and shining; at the sides of the post-scutellum a little silvery-white pubescence; the metathorax above with a broad deep excavation which narrows towards the verge of the truncation, and forms a deep channel which runs down to the insertion of the abdomen; the excavation has a few faintly impressed transverse lines in the middle; wings hyaline, with a fuscous cloud occupying the marginal cell as well as the extreme apex of the wings. Abdomen covered with fine cinereous pile, most dense on the basal margins of the segments.

The male closely resembles the female, but has the mandibles paler, and has also the base of the first joint of the anterior and intermediate tarsi pale; the second and third segments of the abdomen are deeply concave beneath, and very smooth and shining.

Hab. Jamaica.

18. TRYPOXYLON SUBIMPRESSUM. B.M.

Male. Length 4 lines.—Black: the face with a dense silvery

pubescence; the mandibles obscurely rufo-piceous; the cheeks with bright silvery pile; the vertex opake, and having a number of large subimpressed punctures. Thorax: a line of silvery pubescence on the posterior margin of the prothorax, another over the tegulæ; the anterior and posterior margins of the scutellum, and the sides of the metathorax covered with silvery pubescence; a silvery line in the middle of the pectus and also on the margins of the mesothorax beneath, very bright and glittering; a short thin hoary pubescence is scattered over the thorax; the mesothorax very smooth and shining, covered with faintly impressed punctures; the metathorax shining and similarly sculptured to the mesothorax, the truncation transversely striated, and having a deeply impressed longitudinal channel; wings hyaline, a dark fuscous cloud occupying the marginal cell and passing round the apex of the wings. Abdomen smooth and shining, the basal margins of the segments with bands of cinereous pile.

Hab. St. Domingo.

19. TRYPOXYLON CLAVATUM. B.M.

Trypoxylon clavatus, *Say, Bost. Journ.* i. 374. 2.

Hab. N. America (United States).

20. TRYPOXYLON CARINATUM.

Trypoxylon carinatus, *Say, Bost. Journ.* i. 374. 3.

Hab. N. America (Indiana).

21. TRYPOXYLON COLLINUM. B.M.

Female. Length 5½ lines.—Black: the face covered with golden pubescence; the anterior margin of the clypeus, the scape, and five or six of the basal joints of the flagellum, ferruginous. The prothorax, tegulæ, legs, and two basal segments of the abdomen, ferruginous; the wings fuscous, with a violet iridescence, palest towards their base; the vertex, mesothorax and scutellum strongly punctured; the base of the metathorax with divergent striæ, beyond which it is transversely coarsely rugose; in some examples the metathorax has a ferruginous stain at the base.

Hab. East Florida (St. John's Bluff). (Coll. E. Doubleday, Esq.)

22. TRYPOXYLON FRIGIDUM. B.M.

Female. Length 3½ lines.—Black: the head subopake; on the face between the antennæ is a slightly elevated carina; the face and cheeks covered with silvery pubescence. Thorax sub-

opake, very delicately punctured, and with fine, short, downy, silvery pubescence, most dense on the sides and beneath; the outer margin of the tegulæ pale testaceous; the wings subhyaline, their apical margins dark fuscous, the nervures black; the metathorax obliquely striated above, the striation extending to the verge of the truncation, which has a deep central channel and is obliquely and finely striated; the legs simple, the calcaria pale testaceous. Abdomen shining, with a fine thin sericeous pubescence.

Hab. Hudson's Bay.

Very like *Trypoxylon figulus*, but it is proportionally a shorter insect, the abdomen is more thickened at the base, and the metathorax more evenly striated, and wanting the broad central channel which characterizes *T. figulus*.

Genus 2. NITELA.

Nitela, *Latr. Gen. Crust. et Ins.* iv. 210. 1 (1806).

1. NITELA SPINOLÆ. Pl. XII. fig. 4.

Nitela Spinolæ, *Latr. Gen. Crust. et Ins.* iv. 77.
Oliv. Encycl. Méth. viii. 204. 1.
Guérin, Dict. Class. xi. 572.
Van d. Lind, Obs. ii. 39. 1.
Dahlb. Hym. Europ. i. 297. 180.
St. Farg. Hym. iii. 210. t. 27. f. 1 ♀.

Hab. France; Italy; Sweden.

Genus 3. OXYBELUS.

Vespa, pt., *Linn. Syst. Nat.* i. 948 (1766).
Apis et Nomada, pt., *Fabr. Mant.* i. (1787).
Crabro, pt., *Fabr. Ent. Syst.* ii. 293 (1793).
Oxybelus, *Latr. Hist. Nat.* xiii. (1805).

1. OXYBELUS UNIGLUMIS. B.M.

Vespa uniglumis, *Linn. Faun. Suec.* 1681; *Syst. Nat.* i. 951. 18.
Villers, Ent. iii. 271. 14.
Christ. Hym. 246.
Crabro uniglumis, *Fabr. Syst. Ent.* 376. 12; *Ent. Syst.* ii. 300.
Rossi, Faun. Etrus. ii. 92. 884.
Oliv. Encycl. Méth. viii. 595. 34.
Panz. Faun. Germ. 64. 14.

Oxybelus uniglumis, *Latr. Hist. Nat.* xiii. 307. 2.
Fabr. Syst. Piez. 316. 2.
Oliv. Encycl. Méth. viii. 595. 8.
Van d. Lind, Obs. ii. 35. 5.
Shuck. Foss. Hym. 107. 1.
Zett. Ins. Lapp. 446. 1.
Dahlb. Hym. Europ. i. 273. 172.
Guér. Icon. R. Anim. Ins. t. 71. f. 2.
St. Farg. Hym. iii. 221. 13.
Wesm. Hym. Foss. Belg. 157. 1.

Hab. Britain; France; Italy; Germany; Sweden; Lapland.

2. Oxybelus mucronatus. B.M.

Crabro mucronatus, *Fabr. Ent. Syst.* ii. 300. 25.
Oxybelus mucronatus, *Fabr. Syst. Piez.* 318. 5.
Latr. Gen. Crust. et Ins. iv. 79.
Dahlb. Hym. Europ. i. 265. 162.
Wesm. Hym. Foss. Belg. 157. 2.
Oxybelus ferox, *Shuck. Foss. Hym.* 108. 2 ♂.
Oxybelus argentatus, *Curtis, Brit. Ent.* x. 480 ♀.
Shuck. Foss. Hym. 111. 5.

Hab. Britain; France; Italy; Germany; Belgium; Sweden.

3. Oxybelus trispinosus. B.M.

Apis trispinosa, *Fabr. Mant.* i. 303. 60.
Crabro trispinosus, *Fabr. Ent. Syst.* ii. 301. 26.
Oxybelus trispinosus, *Fabr. Syst. Piez.* 318. 7.
Oliv. Encycl. Méth. viii. 597. 15?
Van d. Lind, Obs. ii. 38. 13?
Dahlb. Hym. Europ. i. 270. 169.
St. Farg. Hym. iii. 222. 14.
Wesm. Hym. Foss. Belg. 159. 4.
Oxybelus nigripes, *Oliv. Encycl. Méth.* viii. 596. 12 ♀.
Shuck. Foss. Hym. 109. 3.
St. Farg. Hym. iii. 217. 7.
Van d. Lind, Obs. ii. 37. 10.
Oxybelus mucronatus, *St. Farg. Hym.* iii. 216. 6 ♂?

Hab. Britain; France; Germany; Belgium; Sweden.

4. Oxybelus quatuordecim-notatus. B.M.

Oxybelus 14-notatus, *Jurine, Hym.* 217. t. 11. f. 5.
Latr. Gen. Crust. et Ins. iv. 79.
Oliv. Encycl. Méth. viii. 596. 13.

Oxybelus 14-notatus, *Van d. Lind, Obs.* ii. 37. 11.
St. Farg. Hym. iii. 220. 12.
Oxybelus quatuordecim-guttatus, *Shuck. Foss. Hym.* 112. 6.
Dahlb. Hym. Europ. i. 270. 168.

Hab. France; Italy; Greece.

5. OXYBELUS BELLICOSUS. B.M.

Oxybelus bellicosus, *Oliv. Encycl. Méth.* viii. 595. 9.
Shuck. Foss. Hym. 110. 4 ♂.
Van d. Lind, Obs. ii. 36. 7.
Dahlb. Hym. Europ. i. 269. 167.
St. Farg. Hym. iii. 217. 8.
Lucas, Explo. Sc. Algér. iii. 262.

Hab. France; Germany (Silesia).

The type specimen in the Collection of the British Museum is certainly a male: it is described by Shuckard as a female.

6. OXYBELUS LINEATUS. B.M.

Nomada lineata, *Fabr. Mant.* i. 206. 3.
Crabro lineatus, *Fabr. Ent. Syst.* ii. 300. 24.
Panz. Faun. Germ. 73. 18.
Oxybelus lineatus, *Fabr. Syst. Piez.* 317. 3.
Oliv. Encycl. Méth. viii. 594. 3.
Latr. Gen. Crust. et Ins. iv. 79.
Van d. Lind, Obs. ii. 34. 2.
Crabro tridens, *Fabr. Ent. Syst. Supp.* 270. 24–5.
Oxybelus tridens, *Fabr. Syst. Piez.* 318. 5.
Van d. Lind, Obs. ii. 37. 9.
St. Farg. Hym. iii. 223. 15.

Hab. France; Germany.

7. OXYBELUS BIPUNCTATUS. B.M.

Oxybelus bipunctatus, *Oliv. Encycl. Méth.* viii. 597. 16 ♀.
Van d. Lind, Obs. 38. 14?
St. Farg. Hym. iii. 220. 11.
Wesm. Hym. Foss. Belg. 160. 5.
Oxybelus nigro-æneus, *Shuck. Foss. Hym.* 113. 8 ♂.
Dahlb. Hym. Europ. i. 266. 163.
Oxybelus hæmorrhoidalis, *Dahlb. Hym. Europ.* i. 272. 170?

Hab. France; Germany; Belgium.

8. OXYBELUS FURCATUS.

Oxybelus furcatus, *St. Farg. Hym.* iii. 214. 4 ♀.

Oxybelus furcatus, *Wesm. Hym. Foss. Belg.* 138. 5.
Oxybelus mucronatus, *Van d. Lind, Obs.* ii. 37. 8 ♂.
Hab. France; Germany; Belgium.

9. OXYBELUS ARMIGER.

Oxybelus armiger, *Oliv. Encycl. Méth.* viii. 594. 5.
Van d. Lind, Obs. ii. 56. 6.
St. Farg. Hym. ii. 213. 3.
Hab. France.

10. OXYBELUS LATRO.

Oxybelus latro, *Oliv. Encycl. Méth.* viii. 594. 4.
Van d. Lind, Obs. ii. 35. 3.
St. Farg. Hym. iii. 211. 1.
Hab. France; Italy.

11. OXYBELUS PUGNAX.

Oxybelus pugnax, *Oliv. Encycl. Méth.* viii. 595. 6 ♀.
Van d. Lind, Obs. ii. 35. 4.
Wesm. Hym. Foss. Belg. 163. 7 ♂ ♀.
Hab. Geneva.

12. OXYBELUS RAPTOR.

Oxybelus raptor, *St. Farg. Hym.* iii. 219. 10 ♀.
Hab. France (Paris).

13. OXYBELUS PYGMÆUS.

Oxybelus pygmæus, *Oliv. Encycl. Méth.* viii. 597. 17.
Hab. France.

14. OXYBELUS NIGRICORNIS. B.M.

Oxybelus nigricornis, *Shuck. Foss. Hym.* 112. 7 ♂ ♀.
Dahlb. Hym. Europ. i. 267. 164.
Hab. Britain?

15. OXYBELUS BELLUS.

Oxybelus bellus, *Dahlb. Hym. Europ.* i. 268. 166.
Hab. Germany.

16. Oxybelus hæmorrhoidalis.

Oxybelus hæmorrhoidalis, *Oliv. Encycl. Méth.* viii. 596. 13.
Van d. Lind, Obs. ii. 38. 12?

Hab. France; Germany.

17. Oxybelus fissus.

Oxybelus fissus, *St. Farg. Hym.* iii. 215. 5.

Hab. Lyons.

18. Oxybelus victor.

Oxybelus victor, *St. Farg. Hym.* iii. 218. 9.

Hab. Paris.

19. Oxybelus variegatus.

Oxybelus variegatus, *Wesm. Hym. Foss. Belg.* 162. 6 ♀.

Hab. Geneva.

20. Oxybelus maculipes.

Female. Length 3 lines.—Black: the scape yellow in front; the flagellum ferruginous, slightly fuscous above; the mandibles ferruginous, their tips black; the face covered with silvery down; the head and thorax strongly punctured; a spot on each side of the collar, the tubercles, a spot on each side of the scutellum, and the squama at the posterior margin of the scutellum, yellow; the latter membranaceous exteriorly; the mucro at the base of the metathorax slightly curved, grooved above and acute at its apex; wings hyaline, nervures testaceous, the tegulæ pale testaceous; the legs ferruginous, the anterior and intermediate femora beneath and the base of the tibiæ yellowish-white. Abdomen strongly punctured; the first and second segments have a large pale yellow macula on each side, those on the second pointed within; the third and fourth segments have a transverse band, attenuated in the middle, that on the third sometimes slightly interrupted; the fifth has a semicircular spot; the apical segment ferruginous.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

21. Oxybelus lancifer.

Oxybelus lancifer, *Oliv. Encycl. Méth.* viii. 594. 2.
Van d. Lind, Obs. ii. 34. 1.

Hab. Spain.

22. Oxybelus hastatus.

Oxybelus hastatus, *Fabr. Syst. Piez.* 317. 4.
Oliv. Encycl. Méth. viii. 594. 1.
Dahlb. Hym. Europ. i. 273. 171.

Hab. Mogadore; Spain.

23. Oxybelus lamellatus.

Oxybelus lamellatus, *Oliv. Encycl. Méth.* viii. 593. 7.

Hab. Egypt.

24. Oxybelus Arabs. B.M.

Oxybelus Arabs, *St. Farg. Hym.* iii. 213. 3.
Lucas, Explo. Sc. Algér. iii. 261. t. 12. f. 6.

Hab. Algeria (Oran).

25. Oxybelus agilis. B.M.

Male. Length 3 lines.—Black: head punctured; the flagellum ferruginous, the mandibles rufo-piceous at their apex. Thorax punctured; a spot on each side of the collar, the tubercles, tegulæ in front, the squama, and the lateral margins of the scutellum narrowly, of a yellowish-white; the scutellum rugose and having a central carina; the mucro at the base of the metathorax concave above and obtuse at the apex; the anterior and intermediate tibiæ as well as the tarsi rufo-fulvous; the anterior and intermediate tibiæ outside, the base of the posterior pair and a stripe within, white; the latter are fusco-ferruginous outside. The abdomen with a subinterrupted yellowish-white fascia on the five basal segments; the apical segment obtuse at the apex, somewhat swollen at the base, the sides margined and coarsely punctured; above, the abdomen is shining and strongly punctured, and the entire insect has a thinly scattered short griseous pubescence, the face being silvery.

Hab. India.

26. Oxybelus tridentatus. B.M.

Male. Length 2½ lines.—Black: the head and thorax thinly sprinkled with short glittering silvery hairs, most dense on the face and cheeks; the apex of the scape and the first joint of the flagellum yellow in front; the flagellum fusco-ferruginous; the anterior margin of the clypeus armed with three stout teeth; the mandibles yellow at their base and ferruginous at their apex. Thorax: the collar, tubercles, tegulæ, the squama, and two

oblique lines on each side of the scutellum, running to the base of the wings, white; the anterior and intermediate tibiæ in front, and the posterior pair at their base, white; the posterior tibiæ have also a white stripe within; the anterior and intermediate tibiæ behind and all the tarsi fulvous; the mucro at the base of the metathorax slightly curved, linear, with the apex obtuse. Abdomen: the basal segment with a broad, the second and sometimes the third, with a narrow slightly interrupted white fascia; the apical segment coarsely punctured and truncate at the apex.

Hab. India.

Some examples differ in having the pale markings more or less yellow.

27. OXYBELUS RUFICORNIS. B.M.

Female. Length 2½ lines.—Black: head closely punctured; the face and cheeks with bright silvery pubescence; a thin griseous pubescence on the vertex; the antennæ ferruginous, the scape white in front; the mandibles white, their apex ferruginous. Thorax punctured, thinly covered with griseous pubescence; the collar, tubercles, tegulæ and extreme base of the wings, an ovate spot on each side of the scutellum, the squama, the tip of the mucro at the base of the metathorax, and two narrow lines running from the base of the wings to the scutellum, yellowish-white; the wings hyaline, the nervures pale testaceous; the coxæ and femora ferruginous, the tips of the latter, the tibiæ and tarsi, yellowish-white; the intermediate and posterior tibiæ with a ferruginous stripe outside. Abdomen finely punctured and shining; the basal segment with a large subovate macula on each side, the second segment with a broad fascia, emarginate in the middle anteriorly and narrowed towards the lateral margins, and a narrower continuous fascia on the apical margins of the two following segments, yellowish-white; the apical segment obscurely ferruginous.

Hab. India.

28. OXYBELUS SABULOSUS. B.M.

Female. Length 2½ lines.—Black: head punctured, the face and cheeks with a silvery pubescence; the flagellum fulvous beneath towards the apex; the mandibles yellow at their base and ferruginous at their apex. Thorax strongly punctured; the collar, tubercles, and squama, yellow; the scutellum with a central carina; the mucro short, broad, concave above and notched

at the apex; the anterior femora outside and the tibiæ yellow; the intermediate femora at their apex beneath, the tibiæ at their base and also the base of the posterior pair, yellow; the intermediate and posterior tibiæ at their apex and also the tarsi ferruginous; the wings subhyaline, the tegulæ pale rufo-testaceous. Abdomen: the four basal segments have a subovate yellow macula on each side, the apex ferruginous.

Hab. India.

29. OXYBELUS MARGINATUS. B.M.

Female. Length 3 lines.—Black: head and thorax closely but not coarsely punctured; thinly sprinkled with short yellow pubescence; the face and cheeks covered with silvery pubescence; the antennæ fulvous towards their apex beneath; the mandibles obscurely ferruginous in the middle. A narrow line on the collar, the tubercles, a stripe on the anterior and intermediate femora beneath, and a line on the anterior tibiæ outside, yellow; the scutellum and post-scutellum with a minute yellow dot on each side; the squama pale testaceous; the mucro at the base of the metathorax broad, grooved above, the sides parallel and the apex deeply notched. Abdomen finely punctured, the apical margins of the segments with a narrow pale yellow fascia.

The male closely resembles the female, but has the anterior tarsi fulvous, the intermediate and posterior pair obscurely so, and the posterior tibiæ are yellow behind; the thoracic mucro is more produced and notched, as in the other sex.

Hab. Brazil (Santarem and Villa Nova). (Coll. H. W. Bates.)

30. OXYBELUS AURIFRONS.

Female. Length 3 lines.—Black: the face and cheeks covered with golden pubescence; the flagellum ferruginous, more or less fuscous towards the base above. The collar, tubercles, a spot on each side of the scutellum, the anterior tibiæ in front, and a spot at the apex of the intermediate femora behind, black; the claw-joint of the tarsi pale rufo-testaceous, the pulvillus black; the scutellum and post-scutellum with a central longitudinal carina; the squama pale testaceous, the mucro dilated at the apex, hollowed above, deeply emarginate at the tip. Abdomen shining, finely punctured; the first and three following segments with a narrow, waved, transverse yellow stripe, which is slightly interrupted in the middle, and placed a little before their apical margins.

Hab. Brazil. (Coll. F. Smith.)

31. Oxybelus cordatus.

Oxybelus cordatus, *Spin. Gay's Chili*, vi. 364. 1.

Hab. Chili.

32. Oxybelus marginellus.

Oxybelus marginellus, *Spin. Gay's Chili*, vi. 365. 2.

Hab. Chili.

33. Oxybelus impatiens. B.M.

Female. Length 3 lines.—Black: the flagellum fulvous beneath; the face has a silvery pubescence, on the vertex and disk of the thorax it is yellow, short, and sparing; a minute spot on the tubercles, another on the tegulæ, and a minute spot at the base of the intermediate and posterior tibiæ, yellow; the anterior tibiæ yellowish-white in front, the claw-joint of the tarsi fulvous; the squama pale testaceous, the mucro linear, grooved above and rounded at the apex. Abdomen: each segment has a narrow pale yellow line on each side, the apical segment immaculate.

Hab. California.

34. Oxybelus lætus.

Oxybelus lætus, *Say, Bost. Journ.* i. 375. 3.

Hab. North America (Indiana).

35. Oxybelus emarginatus. B.M.

Oxybelus emarginatus, *Say, Bost. Journ.* i. 375. 1.

Hab. North America (Indiana).

36. Oxybelus 4-notatus.

Oxybelus 4-notatus, *Say, Narr. Exped. St. Peter's River, Append.* p. 71; *Bost. Journ.* i. 375. 2.

Hab. Pennsylvania.

Genus 4. CRABRO.

Sphex, pt., *Linn. Faun. Suec.* 411 (1761).
Vespa, pt., *Linn. Faun. Suec.* 415 (1761).
Crabro, pt., *Fabr. Ent. Syst.* ii. 293 (1793).
Pemphredon, pt., *Fabr. Syst. Piez.* 314 (1804).
Rhopalum, *Kirby, Steph. Syst. Cat.* 366 (1829).

Solenius, Blepharipus, Ceratocolus, Thyreopus, Crossocerus, Lindenius, Corynopus, Physoscelis, Dasyproctus, *St. Farg. Ann. Soc. Ent. Fr.* iii. (1834).
Entomognathus, *Dahlb. Hym. Europ.* i. 295 (1845).
Ectemnius, *Dahlb. Hym. Europ.* i. 389 (1845).
Brachymerus, *Dahlb. Hym. Europ. Synop.* 519 (1845).
Megapodium, *Dahlb. Hym. Europ.* i. 295.
Podagritus, *Spin., Gay's Faun. Chil.* vi. (1854).

Div. 1. *Abdomen petiolated.*

1. CRABRO CLAVIPES. B.M.

Sphex clavipes, *Linn. Faun. Suec.* 411. 1694 ♂; *Syst. Nat.* i. 924. 8.
Crabro crassipes, *Fabr. Ent. Syst. Supp.* 270. 26–7.
Pemphredon crassipes, *Fabr. Syst. Piez.* 315. 3.
Crabro rufiventris, *Panz. Faun. Germ.* 72. 12.
Van d. Lind, Obs. ii. 72. 34.
Shuck. Foss. Hym. 178. 35.
Physoscelis rufiventris, *St. Farg. Ann. Soc. Ent. Fr.* iii. 805. 1 ♂ ♀ (1834); *Hym.* iii. 207. 1.
Rhopalum clavipes, *Dahlb. Hym. Europ.* i. 291. 178.
Wesm. Hym. Foss. Belg. 126. 1.

Hab. Britain; France; Germany; Sweden; Norway.

2. CRABRO TIBIALIS. B.M.

Crabro tibialis, *Fabr. Ent. Syst. Supp.* 271. 27–8.
Panz. Faun. Germ. 83. 14.
Van d. Lind, Obs. ii. 73. 35.
Shuck. Foss. Hym. 177. 34.
Pemphredon tibialis, *Fabr. Syst. Piez.* 315. 4.
Corynopus tibialis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 803. 1 (1834); *Hym.* iii. 205. 1.
Rhopalum tibiale, *Dahlb. Hym. Europ.* i. 288. 177.
Wesm. Hym. Foss. Belg. 127. 3.

Hab. Britain; France; Germany; Denmark; Norway; Finland; Sweden.

3. CRABRO GRACILIS.

Rhopalum gracile, *Wesm. Hym. Foss. Belg.* 126. 2.

Hab. Geneva.

4. CRABRO FLAVO-PICTUS. B.M.

Female. Length 5 lines.—Black and shining; the clypeus

covered with silvery pubescence; the mandibles and scape yellow, the tips of the former ferruginous; the vertex with an impressed oblique channel running from each of the posterior ocelli; the cheeks covered with silvery down. Thorax delicately punctured on the disk; the collar, tubercles, two minute spots on the scutellum and the post-scutellum, yellow; an enclosed shining subcordate space at the base of the metathorax, which has a longitudinal impressed line from the base to the apex; wings hyaline, faintly coloured towards their apical margins, the nervures black; the legs have the tips of the coxæ, trochanters and femora, the anterior and intermediate tibiæ and the base and apex of the posterior pair, yellow; the anterior and intermediate tibiæ have a dark stain behind; the tarsi of a reddish-yellow, with the apical joint rufo-fuscous. Abdomen: the basal petiolated segment yellow, with a longitudinal dark stripe; the second and two following segments have on each side an irregular subovate macula, the apical margin of the fifth yellow, the sixth of a reddish-yellow; beneath, the second and three following segments have an obscure testaceous-yellow waved line at their apical margins.

Hab. Northern India.

5. CRABRO BIPUNCTATUS. B.M.

Dasyproctus bipunctatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 802. 1 (1834); *Hym.* iii. 203. 1.

Dahlb. Hym. Europ. i. 294. 61.

Megapodium Westermanni, *Dahlb. Hym. Europ.* i. 295. 1 (var.?).

Hab. Cape of Good Hope.

Having several specimens of this insect for examination, it is found to vary in colouring as follows:—

Var. β. The scape, collar, tubercles, a spot on the scutellum, two on the second segment of the abdomen, and a transverse line on the fifth segment, pale yellow; the posterior tibiæ black. This is *C. bipunctatus.*

Var. γ. The scape, collar, tubercles, two spots on the second segment of the abdomen, and a transverse line on the fifth, pale yellow; the posterior tibiæ ferruginous; the scutellum immaculate. This appears to be the *Megapodium Westermanni* f Dahlbom.

6. CRABRO WESTERMANNI.

Crabro Westermanni, *Dahlb. Hym. Europ.* i. 295.

Hab. Cape of Good Hope.

7. CRABRO SIMILLIMUS.

Female. Length 4–4½ lines.—Black: the scape yellow, the clypeus covered with silvery pubescence. Thorax: a slightly interrupted yellow line on the collar; the tubercles, tegulæ, tips of the femora, the tibiæ and tarsi, ferruginous; the metathorax rugose, the disk of the thorax finely roughened; the wings fusco-hyaline. Abdomen: the second segment with a transverse spot on each side in the middle, a similar spot on the fourth segment, and a transverse line on the fifth segment, yellow.

The male resembles the female, but is remarkable for having the intermediate and posterior tibiæ and femora fringed beneath with long white pubescence.

Hab. Cape of Good Hope.

This species is closely allied to *C. Westermanni*, but the uniformity of colouring in a number of specimens must be regarded as of specific value.

8. CRABRO FRATER.

Megapodium frater, *Dahlb. Hym. Europ.* i. 295. 2.

Hab. Cape of Good Hope.

9. CRABRO GAYI. B.M.

Podagritus Gayi, *Spin. Gay's Chili*, vi. 357. 1, *Atlas, Zool.* t. 2, *Hym.* f. 6. 6 *a, b, c* ♀.

Hab. Chili.

The genus *Podagritus* does not differ from the *Rhopalum* of Kirby, the latter only varying from the type of the genus *Crabro* of Fabricius in having the abdomen petiolated; but in this extensive and eccentric genus every intervening form may be found: the neuration of the wings is the same in the three above-named genera.

10. CRABRO PALLIPES.

Physoscelis pallipes, *St. Farg. Ann. Soc. Ent. Fr.* iii. 806. 2 (1834); *Hym.* iii. 209. 2.

Rhopalum pallipes, *Dahlb. Hym. Europ.* i. 294.

Hab. South America (Montevideo).

11. CRABRO BREVINODUS.

Physoscelis brevinodus, *Spin. Gay's Chili*, vi. 361. 2, *Atlas, Hym.* t. 2. f. 8 ♀.

Hab. Chili.

12. CRABRO LONGINODUS.

Physoscelus longinodus, *Spin. Gay's Chili*, vi. 359. 1, *Atlas, Hym.* t. 2. f. 7 ♂.

Hab. Chili.

13. CRABRO CRASSINODUS.

Physoscelus crassinodus, *Spin. Gay's Chili*, vi. 362. 3, *Atlas, Hym.* t. 2. f. 9 ♂.

Hab. Chili.

14. CRABRO TRICOLOR. B.M.

Male. Length 5 lines.—Black: the scape yellow; the clypeus covered with silvery pubescence; the second joint of the flagellum slightly produced at its apex beneath; an oblique depression on the side of each of the posterior ocelli. Thorax slightly shining, the sides with a fine short glittering pubescence; the anterior and intermediate legs yellow, with the extreme base of the femora black; the tips of the posterior femora yellow; the tibiæ and tarsi wanting, probably yellow; the wings slightly coloured, beautifully iridescent, their extreme base yellow. Abdomen: the apex of the first segment, the second segment, and base of the third, red; the apical segment punctured and sprinkled with pale hairs.

Hab. Tasmania.

Div. 2. *Abdomen sessile.*

* *Anterior tibiæ of the males dilated into abroad flattened plate.*

15. CRABRO CRIBRARIUS. B.M.

Vespa cribraria, *Linn. Faun. Suec.* 1675 ♂.
Sphex cribraria, *Linn. Syst. Nat.* i. 945. 23.
Sulz. Gesch. Ins. t. 27. f. 6 ♂.
Schrank, Ins. Austr. 384. 779.
Christ. Hym. 281. t. 27. f. 1.
Guêpe ichneumon, *De Geer, Ins.* ii. 810. t. 28. f. 1–5 ♂.
Sphex patellaria, *Schreb. Naturf.* 20. 95. 1.
Crabro cribrarius, *Fabr. Ent. Syst.* ii. 297. 14; *Syst. Piez.* 311. 16.
Panz. Faun. Germ. 15. 18 ♂. 15. 19 ♀.
Latr. Hist. Nat. xiii. 323. 1.
Duméril, Consid. gén. t. 31. f. 3.
Spin. Ins. Lig. ii. 178. 13.
Van d. Lind, Obs. ii. 40. 1.
Shuck. Foss. Hym. 126. 1.

Crabro cribrarius, *Zett. Ins. Lapp.* 444. 7.
Dahlb. Hym. Europ. i. 353. 231.
Wesm. Hym. Foss. Belg. 146. 25.
Thyreopus cribrarius, *St. Farg. Ann. Soc. Ent. Fr.* iii. 752. 1; *Hym.* iii. 158. 1.

Hab. Britain, and throughout Europe.

16. CRABRO PATELLATUS. B.M.

Crabro patellatus, *Panz. Faun. Germ.* 46. 4 ♂.
Van d. Lind, Obs. ii. 48. 3 ♂ ♀.
Shuck. Foss. Hym. 128. 2.
Dahlb. Hym. Europ. i. 356. 232.
Wesm. Hym. Foss. Belg. 145. 24.
Crabro peltatus, *Fabr. Syst. Piez.* 311. 15.
Crabro clypeatus, *Fabr. Ent. Syst.* ii. 297. 15.
Crabro dentipes, *Panz. Faun. Germ.* 46. 9 ♀.
Thyreopus patellatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 756. 3; *Hym.* iii. 161. 3.
Hab. Britain; Germany; France; Belgium; Sweden.

17. CRABRO INTERRUPTUS.

Thyreopus interruptus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 755. 2 ♂; *Hym.* iii. 160. 2.
Crabro interruptus, *Dahlb. Hym. Europ.* i. 359. 233.

Hab. France.

This in all probability is the male of *C. chrysargínus.*

18. CRABRO CETRATUS, B.M.

Crabro cetratus, *Shuck. Foss. Hym.* 131. 4.
Dahlb. Hym. Europ. i. 337. 221.
Wesm. Hym. Foss. Belg. 133. 10.
Crabro dilatatus, *Herr. Schäff. Faun. Germ.* 181. 54.

Hab. Britain; Germany; Sweden; Norway; Finland.

19. CRABRO PTEROTUS. B.M.

Crabro pterotus, *Panz. Faun. Germ.* 83. 16 ♂. 83. 17 ♀.
Fabr. Syst. Piez. 311. 17.
Van d. Lind, Obs. ii. 43. 4.
Dahlb. Hym. Europ. i. 360. 234.
Wesm. Hym. Foss. Belg. 145. 23.
Thyreopus pterotus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 760. 5 ♂; *Hym.* iii. 165. 5.

Ceratocolus reticulatus, *St. Farg. Ann. Soc. Ent. Fr.* 747. 6 ♀? *Hym.* iii. 152. 6.

Hab. France; Germany; Austria; Sweden.

20. CRABRO SCUTATUS. B.M.

Crabro scutatus, *Fabr. Mant.* i. 296. 15 ♂; *Ent. Syst.* ii. 298. 16.
Panz. Faun. Germ. 15. 22.
Oliv. Encycl. Méth. vi. 515. 17.
Van d. Lind, Obs. ii. 44. 5.
Shuck. Foss. Hym. 129. 3 ♂ ♀.
Dahlb. Hym. Europ. i. 329. 216.
Wesm. Hym. Foss. Belg. 135. 13.
Vespa scutata, *Gmelin, Syst. Nat.* i. pt. 5. 2763. 116 ♂.
Sphex palmaria, *Schreb. Naturf.* xx. 100. 6. t. 2. f. 9 ♂.
Crossocerus scutatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 764. 1 ♂ (1834); *Hym.* iii. 168. 1.

Hab. Britain; France; Germany; Belgium.

21. CRABRO LATIPES. B.M.

Male. Length 4 lines.—Black: the head a little wider than the thorax, much narrowed behind the eyes; the stemmata placed in a curve backwards on the vertex; the clypeus yellow, with a black carina in the middle; the mandibles with a yellow stripe outside; the scape white, with a black line behind, broad and narrowed at the base; the flagellum subfusiform, concave beneath, and serrated on the exterior. Thorax: the metathorax rugose; the wings fulvo-hyaline and iridescent, the nervures rufo-testaceous; the anterior legs have the trochanters a little dilated and flattened beneath, and of a very pale yellow colour; the femora pale yellow, broadly dilated, widest at their apex, at the base furnished with two incurved acute teeth; the tibiæ dilated into large oblong concavo-convex plates, the lower posterior angle furnished with an acute spine, the anterior margin pale yellow, behind which it is entirely of a dusky brown, with two or three longitudinal paler lines, at the base having a few narrow whitish streaks; the intermediate femora with a yellow stripe behind; the tibiæ yellow, with a black stain at the base beneath; the tarsi yellow; the posterior legs have the tibiæ and basal joint of the tarsi yellow outside. Abdomen: a pale yellow subinterrupted fascia on the first and three following segments, that on the fifth continuous; the sixth segment with an oblong spot on each side.

Hab. Nova Scotia. (Coll. Lieut. Redman.)

** *Anterior tarsi with one or more of the basal joints dilated.*

22. CRABRO CLYPEATUS. B.M.

Sphex clypeata, *Linn. Syst. Nat.* i. 945. 24 ♂.
Schrank, Ins. Austr. 386. 780.
Christ. Hym. 285. t. 27. f. 5.
Crabro clypeatus, *Fabr. Syst. Ent.* 375. 7 ♂; *Ent. Syst.* ii. 297. 15; *Syst. Piez.* 312. 18.
Rossi, Faun. Etrus. ii. 90. 880.
Oliv. Encycl. Méth. vi. 515. 16.
Latr. Hist. Nat. xiii. 323. 2; *Nouv. Dict.* 2nd ed. 8. 358.
Crabro vexillatus, *Panz. Faun. Germ.* 46. 5 ♂.
Illig. Faun. Etrus. ii. 149.
Van d. Lind, Obs. ii. 45. 6 ♂ (nec ♀).
Shuck. Foss. Hym. 132. 5 ♂.
Dahlb. Hym. Europ. i. 375. 212 ♂ ♀.
Crabro vexillatus, *Wesm. Hym. Foss. Belg.* 147. 27.
Crabro lapidarius, *Fabr. Syst. Piez.* 309. 6 ♀.
Van d. Lind, Obs. ii. 55. 14.
Smith, Cat. Brit. Hym. 120.
Thyreopus clypeatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 758. 4 ♂.
Solenius lapidarius, *St. Farg. Ann. Soc. Ent. Fr.* iii. 721. 8 ♀; *Hym.* iii. 117. 1.

Hab. Britain; France; Germany; Italy; Sweden; Norway; Finland.

A comparison of specimens with the type in the Linnæan Cabinet convinces me of the identity of the British insect with the Swedish one, which has the name *clypeata* attached to it in the handwriting of Linnæus.

23. CRABRO PALMIPES. B.M.

Sphex palmipes, *Linn. Syst. Nat.* i. 944. 20 ♂.
Gmelin, i. 2730. 20.
Vill. Entom. iii. 231. 31.
Crabro palmipes, *Van d. Lind, Obs.* ii. 47. 8.
St. Farg. Ann. Soc. Ent. Fr. iii. 765. 2; *Hym.* iii. 169. 2.
Dahlb. Hym. Europ. i. 332. 217.
Wesm. Hym. Foss. Belg. 135. 14.
Crabro tarsatus, *Shuck. Foss. Hym.* 163. 23.
Crabro pusillus, *Herr. Schäff. Faun. Germ.* 181. 55. t. 24, & t. 23.

Hab. Britain; France; Germany; Belgium; Sweden.

24. Crabro Laportæi.

Crabro Laportæi, *St. Farg. Ann. Soc. Ent. Fr.* iii. 712. 14; *Hym.* iii. 115. 14.

Hab. France.

25. Crabro subterraneus.

Crabro subterraneus, *Fabr. Ent. Syst.* ii. 295. 7; *Syst. Piez.* 309. 8.
Rossi, Faun. Etrus. Illig. ed. ii. 151. 883.
Van d. Lind, Obs. ii. 46. 7.
Dahlb. Hym. Europ. i. 370. 240; *Exam. Crabr.* 71. 20; *Dispos. Meth. Spec. Hym.* 15. 109.
Wesm. Hym. Foss. Belg. 146. 26.
Ceratocolus philanthoides, *St. Farg. Ann. Soc. Ent. Fr.* iii. 742. 3; *Hym.* iii. 147. 3.

Hab. Britain; Italy; France; Germany; Belgium; Finland.

*** *Joints of the antennæ more or less emarginate, sometimes produced beneath, forming teeth; the legs simple.*

26. Crabro alatus.

Ceratocolus alatus, *Panz. Faun. Germ.* 46. 6.
St. Farg. Ann. Soc. Ent. Fr. iii. 750. 10 ♂; *Hym.* iii. 156. 10.
Dahlb. Hym. Europ. i. 372. 241.

Hab. France; Germany.

27. Crabro auratus.

Solenius dives, *St. Farg. Ann. Soc. Ent. Fr.* iii. 716. 4; *Hym.* iii. 122. 5.
Dahlb. Hym. Europ. i. 387. 262.

Hab. France.

28. Crabro cephalotes. B.M.

Crabro cephalotes, *Fabr. Syst. Piez.* 308. 5.
Panz. Faun. Germ. 62. 16.
Van d. Lind, Obs. ii. 55. 13.
Shuck. Foss. Hym. 135. 7.
Dahlb. Hym. Europ. i. 408. 273.
St. Farg. Ann. Soc. Ent. Fr. iii. 697. 1; *Hym.* iii. 100. 1.
Wesm. Hym. Foss. Belg. 151. 33.

Crabro sinuatus, *Fabr. Syst. Piez.* 310. 12.
Crabro vespiformis, *Van d. Lind, Obs.* ii. 54. 12.

Hab. Britain; France; Germany; Belgium; Norway; Sweden; Denmark.

29. CRABRO CHRYSOSTOMUS. B.M.

Crabro fossorius, *Panz. Faun. Germ.* 72. 11? (nec *Linn.*) ♀.
Van d. Lind, Obs. ii. 51. 10 ♂ ♀ (nec *Linn.*).
Crabro lapidarius, *Panz. Faun. Germ.* 90. 12 (nec *Fabr.*) ♂.
Dahlb. Hym. Europ. 405. 272.
Wesm. Hym. Foss. Belg. 151. 32.
Crabro chrysostomus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 704. 7 ♀; *Hym.* iii. 107. 7.
Herr. Schäff. Faun. Germ. 181. 22. t. 13 ♂.
Crabro xylurgus, *Shuck. Foss. Hym.* 139. 9.

Hab. Britain; France; Germany; Belgium; Austria; Sicily; Norway; Sweden; Lapland; Finland.

30. CRABRO COMPTUS.

Crabro comptus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 705. 8; *Hym.* iii. 108. 8.
Dahlb. Hym. Europ. i. 385. 254.

Hab. France.

Both Dahlbom and Wesmael regard this as the male of *C. chrysostomus*; but, as St. Fargeau does not mention the deep emargination of the third and fourth joints of the flagellum, the synonym appears doubtful.

31. CRABRO DIVES.

Crabro dives, *St. Farg. Ann. Soc. Ent. Fr.* iii. 716. 4 ♂ ♀; *Hym.* iii. 122. 5.
Herr. Schäff. Faun. Germ. 181. 26. t. 17, 18.
Dahlb. Hym. Europ. i. 396. 269.
Wesm. Hym. Foss. Belg. 150. 30.
Crabro alatus, *Dahlb. Exam. Crabr.* 85. 23. t. 5 ♂; *Dispos.* 15. 111.

Hab. France; Asia Minor; Germany; Belgium; Sweden.

32. CRABRO FUMIPENNIS.

Solenius fuscipennis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 714. 1; *Hym.* iii. 120. 2. (See Spec. 144.)
Dahlb. Hym. Europ. i. 386. 259.

Hab. France.

33. Crabro Lindenius. B.M.

Crabro Lindenius, *Shuck. Foss. Hym.* 143. 10.
Crabro interruptus, *Dahlb. Hym. Europ.* i. 418. 275.
Crabro striatus, *Wesm. Hym. Foss. Belg.* 156. 35.
Dahlb. Hym. Europ. i. 321. 204.

Hab. France; Belgium; Austria; Sweden; Lapland.

The synonymy of this species is apparently very much confused. Dahlbom considers it to be identical with the *Crabro striatus* of St. Fargeau: that it cannot be so is proved by the position of the stemmata, in a curve; in the genus *Crabro* of St. Fargeau they are in a triangle. Since the remarkable striation of the mesothorax, transversely in front and longitudinally behind, is not mentioned in the descriptions of St. Fargeau's *Crabro, Ceratocolus,* or *Crossocerus striatus,* it is impossible to adopt either of the species as identical with *C. Lindenius.*

34. Crabro fasciatus.

Ceratocolus fasciatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 746. 5 ♂; *Hym.* iii. 151. 5.
Dahlb. Hym. Europ. i. 382. 247.

Hab. France.

35. Crabro fossorius.

Sphex fossoria, *Linn. Faun. Suec.* no. 1662; *Syst. Nat.* i. 946. 32.
Vill. Ent. iii. 236. 39.
Crabro fossorius, *Dahlb. Hym. Europ.* i. 422. 276.
Zett. Ins. Lapp. 442. 1.
Solenius fossorius, *St. Farg. Ann. Soc. Ent. Fr.* iii. 725. 10; *Hym.* iii. 130. 10?

Hab. France; Austria; Germany; Sweden; Finland; Lapland.

36. Crabro grandis.

Solenius grandis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 718. 5; *Hym.* iii. 124. 6 ♀ (var. *C. fossorius*?).

Hab. France.

37. Crabro larvatus. B.M.

Crabro larvatus, *Wesm. Hym. Foss. Belg.* 148. 29.

Hab. Britain; Belgium.

38. CRABRO IMPRESSUS.

Ceratocolus punctatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 749. 9 ♂ ♀; *Hym.* iii. 154. 9.
Dahlb. Hym. Europ. i. 388. 263.

Hab. Vienna.

39. CRABRO LITURATUS.

Crabro lituratus, *Panz. Faun. Germ.* 90. 13 ♀.
St. Farg. Ann. Soc. Ent. Fr. iii. 702. 5; *Hym.* iii. 105. 5.

Hab. Britain; France.

40. CRABRO MAURUS.

Ceratocolus maurus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 153. 7 ♀; *Hym.* iii. 153. 7.
Dahlb. Hym. Europ. i. 382. 248.

Hab. Vienna.

41. CRABRO OCTAVO-NOTATUS.

Solenius octavo-notatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 719. 6; *Hym.* iii. 125. 7.
Dahlb. Hym. Europ. i. 388. 263.

Hab. France.

42. CRABRO ORNATUS.

Crabro ornatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 709. 10 ♀; *Hym.* iii. 112. 10.
Dahlb. Hym. Europ. i. 321. 203.

Hab. France.

43. CRABRO PHILANTHOIDES.

Crabro philanthoides, *Panz. Faun. Germ.* 83. 15.
Fabr. Syst. Piez. 309. 11.

Hab. Germany.

44. CRABRO PETIOLATUS.

Solenius petiolatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 726. 11; *Hym.* iii. 131. 11.
Dahlb. Hym. Europ. i. 388. 265.

Hab. France.

45. Crabro punctatus.

Solenius punctatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 710. 7 ♂; *Hym.* iii. 126. 8.
Dahlb. Hym. Europ. i. 383. 250.

Hab. France.

46. Crabro reticulatus.

Ceratocolus reticulatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 747. 6 ♂; *Hym.* iii. 152. 6.
Crabro pterotus, *Van d. Lind, Obs.* ii. 43. 4.
Dahlb. Hym. Europ. i. 360. 234.

Hab. France.

47. Crabro sexcinctus. B.M.

Crabro sexcinctus, *Fabr. Ent. Syst.* ii. 295. 9?
Panz. Faun. Germ. 64. 13?
Van d. Lind, Obs. ii. 55. 13 ♂ (nec ♀).
Herr. Schäff. Faun. Germ. 181. 18.
Shuck. Foss. Hym. 137. 8 ♂.
Wesm. Hym. Foss. Belg. 154. 34.

Hab. Britain; Germany; Belgium.

48. Crabro vagus.

Sphex vaga, *Linn. Faun. Suec.* no. 1661; *Syst. Nat.* i. 946. 36.
Vill. Ent. iii. 238. 44.
Schæff. Icon. Ins. Ratisb. t. 94. f. 4, 5, & t. 127. f. 6.
Crabro vagus, *Fabr. Syst. Ent.* 375. 8; *Spec. Ins.* i. 471. 10; *Mant.* i. 296. 16; *Ent. Syst.* ii. 298. 17; *Syst. Piez.* 313. 22.
Panz. Faun. Germ. 46. 10.
Rossi, Faun. Etrus. ii. 91. 881.
Oliv. Encycl. Méth. vi. 515. 18.
Schrank, Faun. Boic. ii. 338. 2188.
Latr. Hist. Nat. xiii. 324. 4.
Van d. Lind, Obs. ii. 57. 16.
Shuck. Foss. Hym. 145. 11.
Zett. Ins. Lapp. 442. 2.
Dahlb. Hym. Europ. i. 392. 268.
Wesm. Hym. Foss. Belg. 147. 28.
Solenius vagus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 722. 9; *Hym.* iii. 147. 28.

Hab. Britain, and throughout Europe.

49. CRABRO VESPIFORMIS. B.M.

Crabro vespiformis, *Panz. Faun. Germ.* 53. 14?
St. Farg. Ann. Soc. Ent. Fr. iii. 701. 4; *Hym.* iii. 104. 4.

Hab. France.

50. CRABRO ZIEGLERI.

Ceratocolus punctatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 748. 8 ♀; *Hym.* iii. 154. 8.
Dahlb. Hym. Europ. i. 383. 249.

Hab. Vienna.

51. CRABRO ZONATUS.

Crabro zonatus, *Panz. Faun. Germ.* 47. 7 ♂ (var. *C. sexcinctus*?).
St. Farg. Ann. Soc. Ent. Fr. iii. 700. 3; *Hym.* iii. 103. 3.

Hab. Paris; Germany.

**** *Joints of the antennæ simple; the legs simple. The opposite sex of many of the species not known.*

52. CRABRO ANXIUS. B.M.

Crabro exiguus, *Shuck. Foss. Hym.* 174. 32 (nec *Van d. Lind*).
Dahlb. Hym. Europ. i. 326. 214.
Crabro anxius, *Wesm. Hym. Foss. Belg.* 137. 16 ♂ ♀.

Hab. Britain; Belgium; Sweden.

53. CRABRO ALBILABRIS. B.M.

Crabro albilabris, *Fabr. Ent. Syst.* ii. 302. 31.
Van d. Lind, Obs. ii. 55. 28 ♂ ♀.
Shuck. Foss. Hym. 171. 30.
Zett. Ins. Lapp. 444. 9.
Crabro leucostoma, *Panz. Faun. Germ.* 15. 24; *Krit. Revis.* ii. 185.
Pemphredon albilabris, *Fabr. Syst. Piez.* 316. 8.
Lindenius albilabris, *St. Farg. Ann. Soc. Ent. Fr.* iii. 795. 4; *Hym.* iii. 197. 4.
Dahlb. Hym. Europ. i. 300. 182.
Wesm. Hym. Foss. Belg. 124. 1.
Crabro canescens, *Dahlb. Exam. Crabr. Scand.* 23. 2. t. 1 ♀.

Hab. Britain; France; Italy; Germany; Belgium; Saxony; Denmark; Sweden; Norway; Lapland.

The species included in the genus *Lindenius* of St. Fargeau only differ from the rest of the genus *Crabro* in having the ocelli

in curve, and the mandibles not notched at the base; but the latter character is common to many species of other divisions of the genus: an examination of a large number of species from other countries shows that the former character is evanescent; the ocelli are disposed in every form between an angle and a slight curve.

54. CRABRO BIMACULATUS. B.M.

Crossocerus bimaculatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 788. 25 ♂; *Hym.* iii. 191. 25.
Crabro geniculatus, *Shuck. Foss. Hym.* 169. 28.
Crabro bimaculatus, *Dahlb. Hym. Europ.* i. 310. 190.

Hab. Britain; France; Germany; Austria.

55. CRABRO BREVIS. B.M.

Crabro brevis, *Van d. Lind, Obs.* ii. 70. 32 ♂ ♀.
Shuck. Foss. Hym. 175. 33.
Lindenius brevis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 800. 10; *Hym.* 202. 10.
Entomognathus brevis, *Dahlb. Hym. Europ.* i. 295. 179.
Wesm. Hym. Foss. Belg. 124. 1.

Hab. Britain; France (Paris); Germany; Italy; Belgium; Austria; Sweden.

This species only differs from the majority of the genus in being of a shorter and more robust form, and in having a deep notch, or rather an obtuse tooth, at the base of the mandibles; these differences cannot be regarded as of more than specific value.

56. CRABRO CAPITOSUS. B.M.

Crabro capitosus, *Shuck. Foss. Hym.* 159. 20 ♀.
Dahlb. Hym. Europ. i. 317. 198 ♂ ♀.
Wesm. Hym. Foss. Belg. 129. 3.
Crabro lævipes, *Herr. Schäff. Faun. Germ.* 179. 22. p. 43.

Hab. Britain; Germany; Sweden.

57. CRABRO DIMIDIATUS. B.M.

Crabro dimidiatus, *Fabr. Ent. Syst.* ii. 298. 19 ♀; *Syst. Piez.* 313. 24.
Van d. Lind, Obs. ii. 58. 20 ♂ ♀.
Shuck. Foss. Hym. 151. 14.
Dahlb. Hym. Europ. i. 345. 228.

Crabro serripes, *Panz. Faun. Germ.* 46. 8.
Herr. Schäff. Faun. Germ. 179. 20.
Wesm. Hym. Foss. Belg. 128. 1.
Blepharipus pauperatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 733. 5; *Hym.* iii. 138. 5.

Hab. Britain; France; Germany; Norway; Sweden.

58. CRABRO DIVERSIPES. B.M.

Crabro pubescens, *Shuck. Foss. Hym.* 165. 25 ♂.
Dahlb. Hym. Europ. i. 311. 191.
Crabro diversipes, *Herr. Schäff. Faun. Germ.* 181. 49 ♂ ♀.
Wesm. Hym. Foss. Belg. 134. 12.

Hab. Britain; Belgium.

59. CRABRO ELONGATUS.

Crossocerus elongatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 790. 27 ♂ ♀; *Hym.* iii. 193. 27.

Hab. Belgium.

60. CRABRO EXIGUUS. B.M.

Crabro exiguus, *Van d. Lind, Obs.* ii. 72. 33 ♀.
Shuck. Foss. Hym. 174. 32 ♀, not the ♂.
Wesm. Hym. Foss. Belg. 141. 21 ♂ ♀.

Hab. Britain.

61. CRABRO HYALINUS.

Crabro hyalinus, *Shuck. Foss. Hym.* 161. 21.

Hab. Britain.

62. CRABRO INTERSTINCTUS.

Crabro interstinctus, *Smith, Zool.* ix. *Append.* p. cxxvi.

Hab. Britain. (Coll. F. Smith.)

63. CRABRO LEUCOSTOMA.

Sphex leucostoma, *Linn. Faun. Suec.* no. 1663; *Syst. Nat.* i. 946. 36.
Villers, Entom. iii. 237. 43.
Crabro leucostoma, *Fabr. Syst. Ent.* 376. 13; *Spec. Ins.* i. 472. 17; *Mant.* i. 297. 27; *Ent. Syst.* ii. 301. 27.
Oliv. Encycl. Méth. vi. 518. 35.
Van d. Lind, Obs. ii. 61. 24.

Crabro leucostoma, *Shuck. Foss. Hym.* 153. 15.
Zett. Ins. Lapp. 444. 9.
Dahlb. Hym. Europ. i. 341. 223.
Herr. Schäff. Faun. Germ. 48. 56.
Wesm. Hym. Foss. Belg. 133. 11.
Pemphredon leucostoma, *Fabr. Syst. Piez.* 314. 1.
Crossocerus leucostoma, *St. Farg. Ann. Soc. Ent. Fr.* iii. 777. 13; *Hym.* iii. 180. 13.
Crabro bidens, *Halid. Ent. Mag.* i. 516 ♂.

Hab. Britain; France; Germany; Belgium; Sweden; Lapland.

64. CRABRO LUTEIPALPIS. B.M.

Crossocerus luteipalpis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 785. 23 ♂; *Hym.* iii. 188. 22.
Crabro elongatulus, *Van d. Lind, Obs.* ii. 62. 25 ♂.
Dahlb. Hym. Europ. i. 315. 196.
Shuck. Foss. Hym. 154. 16.
Wesm. Hym. Foss. Belg. 138. 18.
Crabro luteipalpis, *Shuck. Foss. Hym.* 155. 17.

Hab. Britain; France; Germany; Belgium; Norway.

65. CRABRO OBLIQUUS. B.M.

Crabro obliquus, *Shuck. Foss. Hym.* 167. 26 ♂ ♀.
Dahlb. Hym. Europ. i. 315. 195.

Hab. Britain.

66. CRABRO PODAGRICUS. B.M.

Crabro podagricus, *Van d. Lind, Obs.* ii. 60. 23 ♀.
Shuck. Foss. Hym. 157. 19 ♂ ♀.
Wesm. Hym. Foss. Belg. 130. 5.
Crossocerus podagricus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 786. 24; *Hym.* iii. 189. 23.
Crabro vicinus, *Dahlb. Hym. Europ.* i. 333. 218.

Hab. Britain; France; Germany; Belgium; Sweden.

67. CRABRO PROXIMUS.

Crabro proximus, *Shuck. Foss. Hym.* 156. 18.

Hab. Britain.

68. CRABRO PANZERI. B.M.

Crabro Panzeri, *Van d. Lind, Obs.* ii. 67. 29 ♂ ♀.
Shuck. Foss. Hym. 173. 31.

Lindenius Panzeri, *St. Farg. Ann. Soc. Ent. Fr.* iii. 798. 7; *Hym.* iii. 201. 8.
Dahlb. Hym. Europ. i. 302. 183.
Wesm. Hym. Foss. Belg. 124. 1.

Hab. Britain; France; Germany; Belgium; Denmark; Sweden; Finland.

69. CRABRO 4-MACULATUS. B.M.

Crabro 4-maculatus, *Fabr. Ent. Syst.* ii. 294. 4; *Syst. Piez.* 308. 4.
Spin. Ins. Ligur. fasc. iii. 177. 9.
Dahlb. Hym. Europ. i. 351. 230 ♂ ♀.
Wesm. Hym. Foss. Belg. 139. 19.
Crabro mediatus, *Fabr. Syst. Piez.* 312. 20.
Crabro subpunctatus, *Van d. Lind, Obs.* ii. 58. 19 (nec *Rossi*).
Shuck. Foss. Hym. 147. 12.
Crossocerus subpunctatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 766. 3; *Hym.* iii. 170. 3 ♂ ♀.
Blepharipus pauperatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 733. 5; *Hym.* iii. 130. 5.

Hab. Britain; France; Germany; Italy; Belgium; Denmark; Sweden.

70. CRABRO SCUTELLARIS.

Crabro scutellaris, *Smith, Cat. Brit. Hym. Append.* p. 121.

Hab. Britain. (Coll. F. Smith.)

71. CRABRO SHUCKARDI. B.M.

Crabro exiguus, *Shuck. Foss. Hym.* 174. 32 (nec *Van d. Lind*), the ♂ only.

Hab. Britain.

72. CRABRO SIGNATUS. B.M.

Crabro signatus, *Panz. Faun. Germ.* 53. 15 ♀.
Jurine, Hym. 212.
Herr. Schäff. Faun. Germ. 179. 20 & 21.
Wesm. Hym. Foss. Belg. 128. 2 ♂ ♀.
Crabro dimidiatus, *Van d. Lind, Obs.* ii. 60. 20.

Hab. Britain; Germany; Belgium.

73. CRABRO TRANSVERSALIS. B.M.

Crabro transversalis, *Shuck. Foss. Hym.* 162. 22 ♂.
Dahlb. Hym. Europ. i. 317. 197.

Hab. Britain.

74. CRABRO VAGABUNDUS. B.M.

Crabro vagabundus, *Panz. Faun. Germ.* 53. 16 ♂.
Van d. Lind, Obs. ii. 57. 18.
Shuck. Foss. Hym. 149. 30.
Wesm. Hym. Foss. Belg. 132. 8.
Blepharipus mediatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 735. 6; *Hym.* iii. 140. 6 ♂ ♀.
Blepharipus 5-maculatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 738. 9 ♂ (var.); *Hym.* iii. 144. 9.
Herr. Schäff. Faun. Germ. 179. 39 ♂ ♀.
Crabro subpunctatus, *Dahlb. Hym. Europ.* i. 349. 229.
Crabro 4-cinctus, *Dahlb. Hym. Europ.* i. 526. 32 ♀ var.?

Hab. Britain; France; Germany; Belgium; Sweden; Nova Scotia.

75. CRABRO VARIUS.

Crossocerus varius, *St. Farg. Ann. Soc. Ent. Fr.* iii. 775. 12; *Hym.* iii. 179. 12.
Herr. Schäff. Faun. Germ. 181. 48. t. 23.
Dahlb. Hym. Europ. i. 322. 205.
Crabro spinipectus, *Shuck. Foss. Hym.* 163. 23 ♂ ♀.
Dahlb. Hym. Europ. i. 327. 215 (not var. *b* & *c*).
Crabro varius, *Wesm. Hym. Foss. Belg.* 137. 15.

Hab. Britain; France; Germany; Belgium.

Wesmael refers the *C. spinipectus* ♀ to *C. palmipes*, which it certainly is not; the female of *C. palmipes* has been taken in this country since the publication of Shuckard's work, who did not know that sex, which, as Wesmael points out, differs, amongst other particulars, in having black spines at the apex of the anterior tibiæ. *Crabro spinipectus* appears to be correctly reduced to a synonym of the *C. varius*; both sexes have all the spines at the apex of the tibiæ yellow.

76. CRABRO WALKERI. B.M.

Crabro Walkeri, *Shuck. Foss. Hym.* 170. 29 ♂.
Wesm. Hym. Foss. Belg. 140. 20.

Hab. Britain; France; Belgium; Sweden.

77. CRABRO WESMAELI. B.M.

Crabro Wesmaeli, *Van d. Lind, Obs.* ii. 63. 26 ♂ ♀.
Shuck. Foss. Hym. 164. 24.
Dahlb. Hym. Europ. i. 312. 192.
Wesm. Hym. Foss. Belg. 137. 17.

Crossocerus Wesmaeli, *St. Farg. Ann. Soc. Ent. Fr.* iii. 783. 20; *Hym.* iii. 186. 19.

Hab. Britain; France; Germany; Belgium.

78. CRABRO AFFINIS.

Crossocerus affinis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 781. 18 ♀; *Hym.* iii. 184. 17.
Dahlb. Hym. Europ. i. 324. 209.

Hab. France.

79. CRABRO ARMATUS.

Crabro armatus, *Van d. Lind, Obs.* ii. 71. 31.
Lindenius armatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 793. 2; *Hym.* iii. 195. 2.
Dahlb. Hym: Europ. i. 299. 181.
Wesm. Hym. Foss. Belg. 125. 4.

Hab. France; Belgium.

80. CRABRO AMBIGUUS.

Crabro ambiguus, *Dahlb. Dispos. Meth. Spec. Hym.* i. 14. 95; *Hym. Europ.* i. 336. 220.
Wesm. Hym. Foss. Belg. 131. 5.
Crossocerus gonager, *St. Farg. Hym.* iii. 188. 21?
Dahlb. Hym. Europ. i. 325. 212.

Hab. Geneva; Versailles?

81. CRABRO APHIDIUM.

Crossocerus Aphidium, *St. Farg. Ann. Soc. Ent. Fr.* iii. 789. 27 ♀; *Hym.* iii. 192. 26.
Crabro Aphidium, *Dahlb. Hym. Europ.* i. 308. 189.
Herr. Schäff. Faun. Germ. 181. 62.

Hab. France.

82. CRABRO APICALIS.

Lindenius apicalis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 794. 3 ♀; *Hym.* iii. 196. 3.
Dahlb. Hym. Europ. i. 307. 188.

Hab. France.

83. Crabro annulipes.

Blepharipus annulipes, *St. Farg. Ann. Soc. Ent. Fr.* iii. 729. 2 ♀; *Hym.* iii. 134. 2.
Dahlb. Hym. Europ. i. 320. 201.

Hab. France.

84. Crabro binotatus.

Crossocerus binotatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 175. 7 ♀; *Hym.* iii. 175. 7.

Hab. France.

85. Crabro Fargeii.

Ceratocolus striatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 744. 4; *Hym.* iii. 149. 4.

Hab. Paris.

86. Crabro flavipes.

Crabro flavipes, *St. Farg. Ann. Soc. Ent. Fr.* iii. 699. 2; *Hym.* iii. 102. 2.
Dahlb. Hym. Europ. i. 384. 253.

Hab. France.

87. Crabro intricatus.

Crossocerus striatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 776. 11 ♀.
Dahlb. Hym. Europ. i. 381. 245.

Hab. France.

88. Crabro luteipes.

Blepharipus flavipes, *St. Farg. Ann. Soc. Ent. Fr.* iii. 736. 7; *Hym.* iii. 142. 7.
Dahlb. Hym. Europ. i. 384. 253.

Hab. France.

89. Crabro Lefebvrei.

Crossocerus Lefebvrei, *St. Farg. Ann. Soc. Ent. Fr.* iii. 174. 6 ♂; *Hym.* iii. 174. 6.
Dahlb. Hym. Europ. i. 384. 252.

Hab. France.

90. CRABRO LEPELETIERI.

Crossocerus striatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 778. 11; *Hym.* iii. 178. 11.
Crossocerus striatulus, *Dahlb. Hym. Europ.* i. 321. 204.

Hab. France.

91. CRABRO MORIO.

Crossocerus morio, *St. Farg. Ann. Soc. Ent. Fr.* iii. 781. 17; *Hym.* iii. 183. 16.
Dahlb. Hym. Europ. i. 323. 208.

Hab. France.

92. CRABRO NIGER.

Crossocerus niger, *St. Farg. Ann. Soc. Ent. Fr.* iii. 782. 19 ♂; *Hym.* iii. 185. 18.
Dahlb. Hym. Europ. i. 324. 210.

Hab. France.

93. CRABRO NIGRITUS.

Blepharipus nigrita, *St. Farg. Ann. Soc. Ent. Fr.* iii. 134. 1 ♀; *Hym.* iii. 134. 1.
Dahlb. Hym. Europ. i. 320. 200.

Hab. France.

94. CRABRO DECORATUS.

Crossocerus ornatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 774. 10 ♀; *Hym.* iii. 177. 10. (See Spec. 42.)
Dahlb. Hym. Europ. i. 385. 255.

Hab. France.

95. CRABRO OVALIS.

Crossocerus ovalis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 780. 16.
Dahlb. Hym. Europ. i. 323. 207.

Hab. France.

96. CRABRO PALLIDIPALPIS. B.M.

Crossocerus pallidipalpis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 779. 15; *Hym.* iii. 182. 15.
Crabro pallidipalpis, *Dahlb. Hym. Europ.* i. 314. 194.

Hab. France.

97. Crabro pygmæus.

Crabro pygmæus, *Rossi, Faun. Etrus. Mant.* ii. *Append.* 124. 112?
Van d. Lind, Obs. ii. 68. 30 ♀.
Lindenius pygmæus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 797. 6; *Hym.* iii. 199. 6 ♀.
Dahlb. Hym. Europ. i. 305. 185.
Wesm. Hym. Foss. Belg. 125. 3.
Lindenius curtus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 799. 9 ♂; *Hym.* iii. 201. 9.
Dahlb. Hym. Europ. i. 306. 187.

Hab. France; Germany; Belgium.

98. Crabro pusillus.

Crossocerus pusillus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 778. 14; *Hym.* iii. 181. 14.
Lucas, Explo. Sc. Algér. iii. 225. 208.
Crabro pusillus, *Dahlb. Hym. Europ.* i. 323. 206.

Hab. France; Algeria.

99. Crabro rubicola.

Solenius rubicola, *Dufour, Ann. Soc. Ent. Fr.* ix. 25. 10. t. 2. f. 33-36 ♂ ♀.
Crabro (Ectemnius) rubicola, *Dahlb. Hym. Europ.* i. 389. 267.

Hab. France.

100. Crabro læviceps.

Crossocerus rufipes, *St. Farg. Ann. Soc. Ent. Fr.* iii. 784. 21 ♂; *Hym.* iii. 187. 20.
Dahlb. Hym. Europ. i. 324. 211.

Hab. France.

101. Crabro striatulus.

Blepharipus striatulus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 737. 8 ♂; *Hym.* iii. 143. 8.
Crabro striatulus, *Dahlb. Hym. Europ.* i. 367. 238.

Hab. France.

102. Crabro striatus.

Crabro striatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 707. 9; *Hym.* iii. 110. 9.
Lucas, Explo. Sc. Algér. iii. 245.

Crabro cephalotes, *Oliv. Encycl. Méth.* vi. 513. 9 ?
Panz. Faun. Germ. 62. 16.
Spin. Ins. Ligur. ii. 178. 11.

Hab. France.

103. CRABRO SUBÆNEUS.

Lindenius subæneus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 798. 7; *Hym.* iii. 200. 7.
Dahlb. Hym. Europ. i. 305. 186.

Hab. Paris.

104. CRABRO VENUSTUS.

Lindenius venustus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 796. 5 ♀; *Hym.* iii. 198. 5.
Dahlb. Hym. Europ. i. 304. 184.

Hab. France.

105. CRABRO VARIPES.

Crossocerus varipes, *St. Farg. Ann. Soc. Ent. Fr.* iii. 773. 9 ♀; *Hym.* iii. 176. 9.
Dahlb. Hym. Europ. i. 321. 202.

Hab. France.

106. CRABRO ASSIMILIS.

Crabro affinis, *Wesm. Hym. Foss. Belg.* 130. 6 ♀ (nec *St. Farg.*).

Hab. Belgium.

107. CRABRO DENTRICUS.

Crabro dentricus, *Herr. Schäff. Faun. Germ.* 181. 48. no. 7. t. 20 ♂.
Wesm. Hym. Foss. Belg. 143. 22.

Hab. Belgium.

108. CRABRO LÆVIPES.

Crabro lævipes, *Van d. Lind, Obs.* ii. 67. 27 (var. 4-maculatus ♂ ?).
Dahlb. Hym. Europ. i. 313. 193.
Herr. Schäff. Faun. Germ. 317. 198 ?

Hab. Belgium.

109. CRABRO GUTTATUS.

Crabro guttatus, *Van d. Lind, Obs.* ii. 49. 9.
Dahlb. Hym. Europ. i. 400. 270.

Crabro guttatus, *Wesm. Hym. Foss. Belg.* 150. 31.
Crabro spinicollis, *Herr. Schäff. Faun. Germ.* 181. 27. t. 1 & 2.
Crabro parvulus, *Herr. Schäff. Faun. Germ.* 181. 37. t. 15 ♂.
Crabro borealis, *Dahlb. Exam. Crabr.* 81. 22. t. 5 ♂; *Dispos.* 15. 112.

Hab. Belgium; Germany; Austria; Sweden; Finland.

110. Crabro congener.

Crabro congener, *Dahlb. Hym. Europ.* i. 335. 219 ♀.

Hab. Germany.

111. Crabro Loewi.

Crabro Loewi, *Dahlb. Hym. Europ.* i. 368. 239 ♂.

Hab. Germany.

112. Crabro rugifer.

Crabro rugifer, *Dahlb. Hym. Europ.* i. 404. 271 ♂.

Hab. Germany.

113. Crabro sinuatus.

Crabro sinuatus, *Fabr. Syst. Piez.* 310. 12.

Hab. Germany.

114. Crabro annulatus.

Crossocerus annulatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 787. 24 ♀; *Hym.* iii. 190. 24.
Dahlb. Hym. Europ. i. 325. 213.

Hab. Austria (Vienna).

115. Crabro Kollari.

Crabro Kollari, *Dahlb. Hym. Europ.* i. 415. 274.

Hab. Austria; Germany.

116. Crabro varus.

Crabro varus, *Panz. Faun. Germ.* 62. 17.

Hab. Austria.

117. CRABRO BASALIS. B.M.

Female. Length 4½ lines.—Black: the head closely punctured; the clypeus covered with silvery pubescence; the scape yellow, three or four of the basal joints of the flagellum of a reddish-yellow; the mandibles obscurely ferruginous. Thorax longitudinally coarsely rugose, the metathorax behind, and at the sides, transversely striate; a spot on each side of the collar and the tubercles yellow; the wings slightly coloured, the nervures and tegulæ ferruginous; the legs ferruginous, the anterior tibiæ yellowish. Abdomen closely punctured; the basal segment ferruginous, the second, third, fourth and fifth segments with an ovate pale yellow macula on each side; beneath, the first and second segments and the extreme apex ferruginous.

Hab. Polish Ukraine.

118. CRABRO CINXIUS.

Crabro cinxius, *Dahlb. Hym. Europ.* i. 318. 199.
Wesm. Hym. Foss. Belg. 129. 4.

Hab. Norway.

119. CRABRO LAPPONICUS.

Crabro lapponicus, *Zett. Ins. Lapp.* 443. 3 ♀.
Dahlb. Hym. Europ. i. 363. 235.

Hab. Lapland; Norway.

120. CRABRO MELANARIUS.

Crabro podagricus, *Dahlb. Hym. Europ.* i. 339. 222 (nec *Shuck.*).
Crabro melanarius, *Wesm. Hym. Foss. Belg.* 133.

Hab. Sweden.

121. CRABRO SULPHUREIPES. B.M.

Male. Length 4 lines.—Black: the head as large as the thorax, finely punctured, the sides swollen; the clypeus covered with silvery pubescence; the scape and mandibles yellow, their tips rufo-piceous. Thorax closely punctured, the metathorax rugose, with a longitudinal channel extending from the base to the apex; the collar, tubercles, scutellum, post-scutellum, and legs of a sulphur-yellow; the coxæ, trochanters, and extreme base of the femora, black; the wings fulvo-hyaline; the collar produced on each side into a sharp subdentate angle. Abdomen with three broad yellow bands, the first at the base of the second segment and subinterrupted; the second at the base of the fourth,

and the third at the base of the fifth; sometimes a narrow stripe at the base of the sixth.

Hab. Sicily.

This species bears a close resemblance to *C. vagus*, but is at once distinguished by the acuter angles of the prothorax. The femora have sometimes their basal half black.

122. CRABRO BUCEPHALUS.

Male. Length 2¾ lines.—Black and shining: the head wider and larger than the thorax, with scattered punctures, the ocelli placed in a triangle on the vertex, a deep depression at the side of the posterior pair; the face deeply depressed, thinly covered as well as the clypeus with silvery pubescence; the tips of the scape and the flagellum rufo-piceous; a yellow spot at the inner orbit of the eyes, towards the vertex; the mandibles yellow, ferruginous towards their apex, with the tips black. Thorax with a few scattered punctures; the collar elevated, the anterior lateral angles acute; the scutellum, tubercles and collar yellow; the wings hyaline and iridescent; the legs rufo-testaceous; the tips of the anterior and intermediate femora, their tibiæ and tarsi, yellow, the tibiæ with a dark stain beneath; the posterior femora yellow at their base. Abdomen: the first segment with two spots in the middle, the second segment with a large ovate macula on each side.

Hab. Sicily.

123. CRABRO HILARIS. B.M.

Female. Length 4½ lines.—Black: the head closely punctured; the scape, basal joint of the flagellum, the clypeus and mandibles, yellow, the latter black at their apex; the clypeus covered with golden pubescence. Thorax closely punctured; the collar, tubercles, an oblong spot beneath the wings, with one or two minute dots behind, the tegulæ, scutellum, and a minute spot at its anterior angles and two spots on the post-scutellum, yellow; the metathorax ruggedly sculptured; the wings fulvo-hyaline, the nervures and a stain on the tegulæ ferruginous; the apex of the wings smoky; the legs yellow, a rufo-piceous stain on the anterior and intermediate femora above, the posterior pair entirely so; the claw-joint of the tarsi ferruginous. Abdomen elongate, lanceolate, the first segment narrowed at its base and forming a petiole; the petiole dark rufo-piceous, the apical half of the segment yellow; two large maculæ on the second segment nearly touching in the middle, the third, fourth and fifth segments with a broad yellow fascia on their apical

margins; beneath, each segment with a broad bisinuated yellow band on its apical margin; the apex of the first and the base of the second segment ferruginous.

Hab. Florida (St. John's Bluff). (Coll. E. Doubleday, Esq.)

124. CRABRO IMPRESSIFRONS.

Crabro tibialis, *Say, Narr. Exped. St. Peter's River, Append.* p. 73. 1.

Hab. Pennsylvania.

125. CRABRO DUBIUS.

Solenius interruptus, *St. Farg. Ann. Soc. Ent. Fr.* (1834) iii. 716. 3; *Hym.* iii. 122. 4.
Crabro confluentus, *Say, Bost. Journ.* i. 376 (1834–7) (var.?).

Hab. North America.

126. CRABRO MACULATUS. B.M.

Crabro maculatus, *Fabr. Ent. Syst.* ii. 295. 8; *Syst. Piez.* 309. 9.

Hab. North America.

127. CRABRO PICTUS.

Blepharipus maculatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 730. 3; *Hym.* iii. 135. 3 (nec *Fabr.*).
Crabro maculatus, *Dahlb. Hym. Europ.* i. 344. 226.

Hab. North America.

128. CRABRO MACULIPENNIS. B.M.

Blepharipus maculatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 730. 3 ♀ (nec *Fabr.*); *Hym.* iii. 135. 3.
Crabro maculatus, *Dahlb. Hym. Europ.* i. 344. 226.

Hab. North America.

Specimens from Hudson's Bay have the wings spotted a little differently to the description of St. Fargeau, as follows:—a small oblong-quadrate brown spot in the middle of the marginal cell, another at the apex of the externo-medial cell, and a third in the middle of the first recurrent nervure; in other respects the insects agree with St. Fargeau's description; but the species is quite distinct from the *maculatus* of Fabricius.

129. CRABRO SINGULARIS. B.M.

Male. Length 5–6 lines.—Black: the head narrower than the thorax, the vertex much narrowed behind; the face deeply chan-

neled and striated longitudinally before the ocelli, and transversely so behind; the mandibles and scape yellow, the latter with a black spot behind; the base of the flagellum reddish-yellow, the third joint emarginate at the base and thickened at the apex. Thorax: the collar channeled, the lateral angles subdentate, and having a yellow spot on each side, the tubercles yellow; the mesothorax longitudinally striated; the scutellum shining and punctured; the metathorax very coarsely rugulose; wings yellowish, a narrow fuscous stain on the anterior margin beyond the stigma, the nervures ferruginous; the legs yellow, the intermediate femora fuscous beneath, the posterior pair rufo-fuscous, yellowish at their apex above; the apical joints of the tarsi black. Abdomen smooth and shining, subpetiolate; the second and four following segments with an ovate macula on each side at their basal margins, each one smaller than the preceding.

Hab. North America (Trenton Falls). (Coll. E. Doubleday, Esq.)

130. CRABRO 6-MACULATUS. B.M.

Crabro 6-maculatus, *Say, Narr. Exped. St. Peter's River, Append.* p. 74. 3.

Hab. Pennsylvania.

131. CRABRO SCUTELLATUS.

Crabro scutellatus, *Say, Narr. Exped. St. Peter's River, Append.* p. 74. 2.

Hab. Pennsylvania.

132. CRABRO SCABER.

Solenius scaber, *St. Farg. Ann. Soc. Ent. Fr.* iii. 715. 2 ♂; *Hym.* iii. 121. 3.
Dahlb. Hym. Europ. i. 387. 260.

Hab. Philadelphia.

133. CRABRO RUFIPES.

Ceratocolus rufipes, *St. Farg. Ann. Soc. Ent. Fr.* iii. 741. 2 ♀; *Hym.* iii. 146. 2.
Dahlb. Hym. Europ. i. 381. 244.

Hab. Carolina.

134. CRABRO OBSCURUS. B.M.

Female. Length 4 lines.—Black: head large, subquadrate; the ocelli in a triangle on the vertex; the clypeus covered with

golden pubescence; the middle of the mandibles and the scape yellow. Thorax: a spot on each side of the collar, the tubercles, and a spot in the middle of the post-scutellum, yellow; the mesothorax longitudinally roughened; the scutellum shining and with longitudinal punctures; the metathorax with a deep central longitudinal channel, which is transversely striated; the base of the metathorax coarsely obliquely striated, posteriorly transversely so; the wings slightly coloured, the nervures rufo-testaceous; the tibiæ and tarsi yellow; the claw-joint fuscous, as well as the second, third and fourth joints of the posterior pair. Abdomen smooth and shining, the second, third and fourth segments with a yellow fascia on their basal margins, the first three interrupted; the apical segment pinched at the sides and covered with yellow pubescence; beneath, immaculate.

The male closely resembles the female, but has a silvery pubescence on the clypeus, and the spots on the collar and post-scutellum obliterated; the fasciæ on the abdomen reduced to oblong lateral spots; the tibiæ have a black stain beneath.

Hab. Hudson's Bay. (Coll. G. Barnston, Esq.)

135. CRABRO TRIFASCIATUS. B.M.

Crabro trifasciatus, *Say, Narr. Exped. St. Peter's River, Append.* p. 74. 4 (var. 6-maculatus?).

Hab. Pennsylvania; Hudson's Bay.

This species scarcely differs from *C. vagus*, and may be regarded as the American representative of it: the yellow markings are much paler; the antennæ of the male are of the same form as in *C. vagus*, and are apparently 12-jointed, as in that species.

136. CRABRO FRIGIDUS. B.M.

Female. Length 5½ lines.—Black: the head finely punctured, the cheeks sparingly so, smooth and shining; the ocelli in a curve on the vertex; the scape and mandibles yellow, the base and apex of the latter black. Thorax: the mesothorax longitudinally striated; the scutellum shining, punctured at the base, and longitudinally striated beyond; the metathorax with a subdefined half-circular space at its base, which is coarsely striated obliquely; posteriorly it is very coarsely and deeply rugulose; a spot on each side of the collar and the tubercles yellow, the anterior lateral angles of the collar subdentate; the knees, tibiæ and tarsi yellow, the apical joints of the latter fuscous, the extreme apex of the tibiæ with a ferruginous stain; the wings

fusco-hyaline. Abdomen smooth and shining, the first segment very delicately punctured, the following segments more distinctly so; the second and three following segments with an ovate pale yellow macula on each side at their basal margin; the apical segment produced into an obtuse spine, which has a sharp raised margin, and is covered sparingly with oblong punctures.

Hab. North America.

137. CRABRO CONFLUENTUS. B.M.

Crabro confluentus, *Say, Bost. Journ.* i. 376.

Hab. N. America (Indiana).

138. CRABRO COLLINUS. B.M.

Male. Length 5 lines.—Black: the head closely punctured; the clypeus and face with a golden pubescence; the cheeks thinly covered with silvery pubescence; the antennæ simple; the scape, basal joint of the flagellum, and the mandibles, yellow, the apex of the latter black. Thorax: the mesothorax coarsely punctured; the metathorax with a transverse enclosed space at its base, which is closely punctured, and with a series of deep fossulets around its margins, the sides and posterior portion very coarsely rugulose; the collar, tubercles, a spot on the tegulæ in front, and the post-scutellum, yellow; the legs yellow, with the femora reddish; wings fusco-hyaline, the tegulæ ferruginous. Abdomen shining, closely punctured, most sparingly but most strongly so at the base; an elongate-ovate yellow spot on each side of the three basal segments; the two following have a transverse narrow yellow band; the first slightly interrupted.

Hab. East Florida (St. John's Bluff): (Coll. R. Foster, Esq.)

139. CRABRO CHRYSARGINUS. B.M.

Crabro chrysarginus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 711. 12; *Hym.* iii. 114. 12.

Crabro arcuatus, *Say, Bost. Journ.* i. 377.

Crabro chrysargurus, *Dahlb. Hym. Europ.* i. 386. 257.

Hab. N. America (Indiana); Hudson's Bay.

140. CRABRO AURIFRONS. B.M.

Female. Length 6 lines.—Black: the clypeus and face covered with golden pubescence; the scape, basal joint of the flagellum, and the mandibles, yellow outside; the head as wide as the thorax, delicately punctured, with the ocelli in an obtuse

triangle. Thorax: the collar slightly interrupted, the tubercles, a line at the base of the scutellum, and the post-scutellum, yellow; the mesothorax and scutellum coarsely punctured; the metathorax with an enclosed space at its base and a broad longitudinal channel which is transversely carinated, and entirely coarsely rugose; the wings fulvous, the nervures and tegulæ ferruginous; the legs reddish-yellow, the femora darkest, the apical joints of the tarsi fuscous. Abdomen finely punctured; the first and second segments with a lateral ovate yellow spot in the middle; the third, fourth and fifth segments with a narrow line on each side in the middle, the lines extending further inwards on each successive segment.

Hab. Georgia.

141. CRABRO ADVENA. B.M.

Female. Length 4½ lines.—Black: the head with fuscous pubescence; the scape, clypeus, and a stripe on the mandibles, yellow; the clypeus covered with silvery pubescence; the ocelli in a triangle on the vertex. Thorax: a slightly interrupted line on the collar, tubercles, and a transverse stripe at the base of the scutellum, yellow; the mesothorax closely punctured, the metathorax very coarsely rugose; the tibiæ and tarsi yellow, a fuscous spot on the tibiæ beneath at their apex; the apical joints of the tarsi rufo-fuscous; the wings fusco-hyaline, the nervures and tegulæ ferruginous. Abdomen: the first, second and third segments with an interrupted yellow band placed a little behind the middle; the fourth and fifth segments with a yellow fascia on their apical margins; the apical segment forming an elongated triangle, obtuse at the apex and longitudinally rugose; beneath, smooth, shining and impunctate.

Male.—The clypeus and mandibles black; the flagellum fulvous beneath, with the second, third, fourth and fifth joints produced into a tooth at the apex; the punctures of the mesothorax running into elongate striæ; the thorax beneath covered with hoary pubescence; the anterior femora are ferruginous within, black behind, and have a yellow stripe beneath; the intermediate femora yellow at their apex; the tibiæ are yellow above and black beneath; the tarsi yellow, their apical joints fusco-ferruginous; all the segments of the abdomen with yellow fasciæ, the first four slightly interrupted.

Hab. Nova Scotia.

142. CRABRO UNICOLOR. B.M.

Female. Length 6 lines.—Black: the head and thorax opake;

the abdomen shining; the stemmata in a triangle on the vertex; the face deeply canaliculated, covered, as well as the clypeus, with silvery pubescence. The disk of the thorax very finely and closely punctured, slightly shining; the metathorax finely longitudinally rugose, with a central longitudinal channel extending from the base to the apex; wings smoky, the posterior pair palest. Abdomen faintly punctured towards the apex, the apical segment more strongly so, with the margins carinated, the apex rounded.

Hab. Sandwich Islands.

143. CRABRO DISTINCTUS. B.M.

Female. Length 3 lines.—Black: the head and thorax opake; the stemmata in a curve on the vertex; the face canaliculated; the inner orbit of the eyes half-way towards their vertex, and the clypeus, covered with golden pubescence; the scape and mandibles yellowish-white, the tips of the mandibles, and a narrow stripe on the scape within, black. Thorax: an interrupted line on the collar, the tubercles and a spot behind, the scutellum and post-scutellum, yellowish-white; wings faintly coloured and iridescent. Abdomen: the basal segment with a large transverse irregular-shaped spot, which is somewhat arched in front, and with two deep rounded emarginations behind, which have a wide one outside extending to the apex of the spot; the second, fourth and fifth segments have an uninterrupted fascia at their base, of a yellowish-white; the apical segment shining and punctured.

Hab. Sandwich Islands.

144. CRABRO FUSCIPENNIS.

Crabro fuscipennis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 710. 11; *Hym.* iii. 113. 11.

Dahlb. Hym. Europ. i. 385. 255.

Hab. India.

145. CRABRO INSIGNIS.

Female. Length 6½ lines.—Black: head opake, subquadrate, rather wider than the thorax; the stemmata in a curve placed forwards on the vertex; the clypeus covered with pale golden pubescence; antennæ and mandibles black. Thorax opake; the collar grooved, with the anterior angles acute; the mesothorax longitudinally striated, with three abbreviated carinæ in front; the metathorax with a half-circular space at its base,

enclosed by a sharp ridge, in the centre of which are two longitudinal carinæ; on each side it is striated; the sides coarsely rugose, behind transversely striated; the wings fusco-hyaline, with a violet iridescence, the nervures rufo-fuscous; the anterior tibiæ ferruginous within; the posterior femora with a yellow stripe above, and the tibiæ with a stripe outside. Abdomen shining, the first segment with a yellow band in the middle which emits a quadrate spot in front and has two deep notches behind; the second, third, fourth and fifth segments with a yellow fascia at their basal margins, which are narrowed in the middle; beneath, the second and third segments have a yellow spot on each side.

Hab. India. (Coll. W. W. Saunders, Esq.)

146. CRABRO ARGENTATUS.

Lindenius argentatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 792. 1; *Hym.* iii. 194. 1.
Dahlb. Hym. Europ. 300. 182.

Hab. India.

147. CRABRO SEMIPUNCTATUS.

Crabro semipunctatus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 711. 13 ♀; *Hym.* iii. 115. 13.
Dahlb. Hym. Europ. i. 386. 258.

Hab. Rio Janeiro.

148. CRABRO OPULENTUS. B.M.

Female. Length 4 lines.—Black: the head closely punctured, the ocelli in a curve; the face, above the insertion of the antennæ, with a changeable golden pile; a similar lustre on the vertex behind the eyes; that on the lower portion of the cheeks, base of the mandibles, clypeus, and inner orbit of the eyes, is dense, bright and silvery; the scape yellow. Thorax: the mesothorax covered with large confluent punctures; the scutellum with distinct separated punctures; the mesothorax has a central carina, and on each side of it a much more elevated one, all extending from the base to the disk; the metathorax with a deep longitudinal central channel, and a half-circular sub-enclosed space at its base, which is obliquely and very coarsely grooved; on each side of the enclosure it is coarsely sculptured; the posterior portion of the metathorax coarsely rugose, the lateral margins raised; the collar, tubercles, a spot beneath the wings, a double spot at the anterior lateral angles of the scutellum, and the post-scutellum, yellow; a spot at the apex of the anterior

femora beneath, another on the tibiæ above; the intermediate femora beneath, the tibiæ at their base above, and the posterior tibiæ with a stripe at their apex outside, yellow; the tarsi rufopiceous; the wings slightly coloured and iridescent. Abdomen: the two basal segments strongly punctured, the base of the first smooth and shining, the apical margins of both depressed; the first and second segments with a broad, oblong, transverse macula on each side in the middle; the third, fourth and fifth segments with a narrow interrupted fascia, also in the middle; the apical segment pinched in at the sides, which are yellow; above, with the sides raised, forming an oblong channel.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

149. Crabro flavipennis.

Ceratocolus flavipennis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 740. 1; *Hym.* iii. 145. 1.
Dahlb. Hym. Europ. i. 381. 243.

Hab. Brazil.

150. Crabro crœsus.

Solenius crœsus, *St. Farg. Ann. Soc. Ent. Fr.* iii. 727. 12 ♂ ♀; *Hym.* iii. 132. 12.
Dahlb. Hym. Europ. i. 388. 266.

Hab. Cuba.

151. Crabro carbonarius. B.M.

Female. Length 6 lines.—Black: the head and thorax slightly shining; the clypeus covered with silvery pubescence. Thorax: the lateral angles of the collar produced and acutely margined; at the sides, immediately beneath the raised margin, is a fossulet; the collar above has sometimes two slightly raised tubercles; the mesothorax smooth, with an abbreviated impressed line on each side, rather before the tegulæ; the impressed line at the margins of the scutellum simple, that at the base of the metathorax consute; the metathorax smooth and shining, with a deeply impressed line down the centre, which expands into a broad fossulet at the apex; at the sides a little griseous pubescence; the wings hyaline, the nervures ferruginous, the costal nervure black; the tegulæ testaceous; the apical joints of the tarsi testaceous. Abdomen highly polished, smooth and shining; the fourth segment pubescent; its apical margin fuscous; the apical segment punctured and sprinkled with pale hairs, its margins raised.

Hab. New Zealand.

152. CRABRO OCCULTUS.

Crabro? occultus, *Fabr. Syst. Piez.* 310. 14.
Dahlb. Hym. Europ. i. 343. 221.

Hab. Tangiers.

153. CRABRO CHRYSIS.

Crossocerus chrysis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 770. 5 ♂; *Hym.* iii. 173. 5.
Dahlb. Hym. Europ. i. 366. 236.

Hab. Brazil.

154. CRABRO TASMANICUS. B.M.

Female. Length 6 lines.—Black: head subopake, very closely punctured, the inner orbit of the eyes and the clypeus covered with silvery pubescence, the latter with a central carina; antennæ wanting. Thorax opake; an interrupted line on the collar, which is deeply grooved, with the lateral angles acute; the enclosed space at the base of the metathorax obliquely rugose, the posterior portion transversely so; wings slightly coloured; the tegulæ rufo-testaceous; the anterior femora ferruginous, the intermediate and posterior pairs above and the tibiæ and tarsi ferruginous. Abdomen shining, very closely and finely punctured, the second segment with an oblique yellow stripe on each side at the base; the fourth segment with a yellow band at the basal margin; beneath, very smooth and shining.

Hab. Tasmania.

155. CRABRO LUTEICOLLIS.

Crossocerus lutei-collis, *St. Farg. Ann. Soc. Ent. Fr.* iii. 769. 4; *Hym.* iii. 172. 4.
Dahlb. Hym. Europ. i. 384. 251.

Hab. ——?

Genus 5. SPILOMENA.

Stigmus, pt., *Van d. Lind, Obs.* ii. 74 (1829).
Celia, *Shuck. Foss. Hym.* 182 (1837).
Spilomena, *Shuck. Trans. Ent. Soc.* ii. 79 (1840).

1. SPILOMENA TROGLODYTES. B.M.

Stigmus troglodytes, *Van d. Lind, Obs.* ii. 74. 2.
St. Farg. Hym. iii. 99. 2.

Celia troglodytes, *Shuck. Foss. Hym.* 182. 1.
Dahlb. Hym. Europ. i. 238. 139.
Spilomena troglodytes, *Wesm. Hym. Foss. Bely* 123. 1.
Smith, Cat. Brit. Hym. 32. gen. 4.

Hab. Britain; France; Germany; Belgium; Sweden.

Genus 6. STIGMUS.

Stigmus, *Jurine, Hym.* p. 139 (1804).

1. STIGMUS PENDULUS. Pl. X. fig. 1. B.M.

Stigmus pendulus, *Panz. Faun. Germ.* 86. 7.
Van d. Lind, Obs. ii. 74. 1.
Shuck. Foss. Hym. 181. 1.
Dahlb. Hym. Europ. i. 239. 141.
St. Farg. Hym. iii. 98. 1.
Wesm. Hym. Foss. Bely. 122. 1.
Stigmus ater, *Jurine, Hym.* 132. t. 9. gen. 7.
Latr. Gen. Crust. et Ins. iv. 84.
Spin. Ins. Lig. ii. 174. 1; *Ann. Soc. Ent. Fr.* (1840) p. 35.

Hab. Britain; France; Italy; Germany; Belgium; Sweden.

Genus 7. PASSALŒCUS.

Pemphredon, pt., *Van d. Lind, Obs.* ii. 79 (1829).
Diodontus, pt., *Curtis, Brit. Ent.* xi. 496 (1835).
Xylæcus, *Shuck. Foss. Hym. Consp. Gen.* (1837).
Passalœcus, *Shuck. Foss. Hym.* 188 (1837).

1. PASSALŒCUS INSIGNIS. B.M.

Pemphredon insignis, *Van d. Lind, Obs.* ii. 79. 3 ♂ (non ♀).
St. Farg. Hym. iii. 96. 3?
Diodontus insignis, *Curtis, Brit. Ent.* fol. 497. pl. 497.
Passalœcus insignis, *Shuck. Foss. Hym.* 189. 1.
Dahlb. Hym. Europ. i. 248. 148.
Wesm. Hym. Foss. Belg. 122. 4.

Hab. Britain; France; Germany; Belgium.

2. PASSALŒCUS CORNIGER. B.M.

Passalœcus corniger, *Shuck. Foss. Hym.* 191. 3.
Dahlb. Hym. Europ. i. 245. 145.

Hab. Britain; Sweden.

3. PASSALŒCUS TURIONUM.

Passalœcus Turionum, *Dahlb. Hym. Europ.* i. 246. 146.
Wesm. Hym. Foss. Belg. 122. 3.

Hab. Germany; Sweden; Norway.

4. PASSALŒCUS GRACILIS. B.M.

Diodontus gracilis, *Curtis, Brit. Ent.* xi. t. 496.
Passalœcus gracilis, *Shuck. Foss. Hym.* 190. 2.
Dahlb. Hym. Europ. 242. 142.
Wesm. Hym. Foss. Belg. 121. 1.

Hab. Britain; Germany; Norway; Sweden; Finland.

5. PASSALŒCUS MONILICORNIS.

Pemphredon insignis, *Van d. Lind, Obs.* ii. 79. 3 ♀ (non ♂).
Passalœcus monilicornis, *Dahlb. Hym. Europ.* i. 243. 144.
Wesm. Hym. Foss. Belg. 122. 2.

Hab. Germany; Sweden; Norway; Finland.

6. PASSALŒCUS SINGULARIS.

Passalœcus singularis, *Dahlb. Hym. Europ.* i. 243. 143 (var. *gracilis* ♂?).

Hab. Scandinavia.

7. PASSALŒCUS BOREALIS.

Passalœcus borealis, *Dahlb. Hym. Europ.* i. 247. 147 ♂ ♀.

Hab. Lapland; Norway.

8. PASSALŒCUS CUSPIDATUS. B.M.

Female. Length 3¼ lines.—Black: the head finely and closely punctured; the scape in front, the labrum and mandibles yellow, the latter rufo-piceous at their apex; the palpi yellow. Thorax closely and finely punctured on the disk; the metathorax coarsely rugose; the wings fusco-hyaline, the costal nervure and stigma black, the nervures testaceous; the anterior tibiæ in front, the tubercles and base of the posterior tibiæ, yellow; the apical joints of the tarsi fusco-ferruginous, the anterior pair palest. Abdomen: the petiole very short, rugose above; the abdomen smooth and shining.

Hab. Hudson's Bay.

Genus 8. PEMPHREDON.

Crabro, pt., *Fabr. Ent. Syst.* ii. 293 (1793).
Sphex, pt., *Panz. Faun. Germ.* 52 (1804).
Pemphredon, *Latr. Hist. Nat. Ins.* xiii. (1805).
Cemonus, *Jurine, Hym.* 214 (1807).

1. PEMPHREDON LUGUBRIS. B.M.

Crabro lugubris, *Fabr. Ent. Syst.* ii. 302. 30.
Sphex unicolor, *Panz. Faun. Germ.* 52. 24.
Cemonus unicolor, *Panz. Krit. Revis.* ii. 187.
Jurine, Hym. t. 11. gen. 28.
Cemonus lugubris, *Jurine, Hym.* p. 214.
St. Farg. Hym. iii. 94. 1.
Pemphredon lugubris, *Latr. Hist. Nat.* xiii. 325.
Fabr. Syst. Piez. 315. 2.
St. Farg. & Serv. Encycl. Méth. x. 48. 1.
Van d. Lind, Obs. ii. 80. 4.
Shuck. Foss. Hym. 196. 1.
Dahlb. Hym. Europ. 259. 159.
Zett. Ins. Lapp. 441. 1.
Wesm. Hym. Foss. Belg. 118. 1.

Hab. Britain; France; Germany; Belgium; Sweden; Norway.

2. PEMPHREDON LUCTUOSUS. B.M.

Pemphredon luctuosus, *Shuck. Foss. Hym.* 197. 2 ♂.
Dahlb. Hym. Europ. i. 258. 158.

Hab. Britain.

This is in all probability a variety of the male of *lugubris*, the only difference being that the ridge which encloses the subcordiform space at the base of the metathorax is smooth and shining, whereas it is usually obliquely striated; but every degree of approach to smoothness is to be met with. No example of the female has occurred with the smooth limbus, although many hundreds have been examined.

3. PEMPHREDON MONTANUS.

Pemphredon montanus, *Dahlb. Hym. Europ.* i. 262. 160 ♀ ♂.

Hab. Italy; Norway; Lapland.

4. PEMPHREDON LUGENS.

Pemphredon lugens, *Dahlb. Disp. Meth. Spec. Hym.* 12. 76 ♀ ♂. *Zett. Ins. Lapp.* 444. 1.

Hab. Sweden; Lapland; Gothland.

5. PEMPHREDON ANNULATUS.

Pemphredon? annulatus, *Say, Bost. Journ.* i. 379. 2.

Hab. N. America (Indiana).

6. PEMPHREDON CONCOLOR.

Pemphredon? concolor, *Say, Narr. Exped. St. Peter's River, Append.* p. 72. 1.

Hab. Pennsylvania.

7. PEMPHREDON MARGINATUS.

Pemphredon? marginatus, *Say, Bost. Journ.* i. 379. 1.

Hab. N. America; Pennsylvania.

Genus 9. MIMESA.

Trypoxylon, pt., *Fabr. Syst. Piez.* 182. 6 (1804).
Psen, *Latr. Nouv. Dict.* 2nd ed. 28 (1816).
Mimesa, *Shuck. Foss. Hym.* 228 (1837).

1. MIMESA UNICOLOR. B.M.

Psen unicolor, *Van d. Lind, Obs.* ii. 105. 3.
Mimesa unicolor, *Shuck. Foss. Hym.* 231. 3 ♂ ♀.
Wesm. Hym. Foss. Belg. 108. 1.
Smith, Cat. Brit. Hym. 41. 3.
Mimesa borealis, *Dahlb. Hym. Europ.* i. 2. 2 ♂ ♀.

Hab. Britain; Germany; Belgium; Sweden.

Dahlbom, in the diagnosis of this species, says that the petiole is carinated above, the carina being "non sulcata." The examination of a large number of examples shows this to be a variable character: in some specimens of males the channel is scarcely perceptible; and there can be little doubt of the correctness of Wesmael's opinion in regarding the *M. borealis* as synonymous with *M. bicolor*.

2. MIMESA DAHLBOMI. B.M.

Mimesa unicolor, *Dahlb. Hym. Europ.* i. 1. 1 ♂ ♀.
Psen unicolor, *St. Farg. Hym.* iii. 44. 4.
Mimesa Dahlbomi, *Wesm. Hym. Foss. Belg.* 108. 2.

Hab. Britain; France; Belgium; Sweden; Lapland.

This species is here introduced for the first time into the British list. It was detected amongst the examples arranged as *M. unicolor* in the collection of the late J. F. Stephens, Esq.

3. MIMESA EQUESTRIS. B.M.

Trypoxylon equestre, *Fabr. Syst. Piez.* 182. 6.
Psen rufa, *Panz. Faun. Germ.* 96. 17 ♀?
Psen equestris, *Panz. Krit. Revis.* ii. 110.
Van d. Lind, Obs. ii. 107. 4.
Curtis, Brit. Ent. i. t. 25 ♀.
Mimesa equestris, *Shuck. Foss. Hym.* 229. 1 ♂ ♀.
Dahlb. Hym. Europ. i. 4. 5.
Wesm. Hym. Foss. Belg. 109. 3?
Mimesa Shuckardi, *Wesm. Hym. Foss. Belg.* 115. 5.

Hab. Britain; France; Germany; Sweden.

M. Wesmael has been misled in changing the name *M. equestris* to *M. Shuckardi*, supposing the British species to be distinct from the *equestris* of Fabricius; this is quite possible, and the examples referred to this species by M. Wesmael are probably distinct; but although Shuckard has not described the petiole so minutely as Wesmael, yet all his characters belong to it: *its dorsal surface is flat, shining, and more or less rugose; the lateral faces are bordered by an elevated longitudinal line, and have also a central carina; beneath, it is flat and slightly hollowed out at its extremity, and the second segment has sometimes an irregularly shaped black spot.*

4. MIMESA BICOLOR. B.M.

Psen bicolor, *Jurine, Hym.* t. 13 ♂.
Mimesa bicolor, *Shuck. Foss. Hym.* 230. 2 ♂ ♀.
Wesm. Hym. Foss. Belg. 113. 4.
Mimesa lutaria, *Dahlb. Hym. Europ.* i. 4. 4.
Psen equestris, *St. Farg. Hym.* iii. 43. 3.

Hab. Britain; France; Belgium; Scandinavia.

5. MIMESA FRATERNUS.

Mimesa? fraternus, *Say, Narr. Exped. St. Peter's River, Append.* 73.

Hab. Pennsylvania.

6. MIMESA MELLIPES.

Psen? mellipes, *Say, Bost. Journ.* i. 369. 1.

Hab. N. America (Indiana).

7. MIMESA BOREALIS. B.M.

Male. Length 2¾ lines.—Black: the head shining and finely punctured on the vertex, the face with a thin silvery pubescence; the antennæ clavate; tips of the mandibles ferruginous. Thorax shining and punctured, sparingly pubescent above, more thickly so on the sides and beneath, the pubescence of a silvery brightness; the metathorax very coarsely rugose; the tarsi pale rufo-testaceous; the wings hyaline and iridescent. Abdomen very smooth and shining, beyond the first segment thinly covered with short silky pubescence; the petiole with a longitudinal central carina, its apex acuminate, and having a central channel running from the base to the apex.

Hab. Hudson's Bay.

This species closely resembles the *M. unicolor*, but the antennæ are much more clavate; the metathorax is also much more coarsely sculptured:

8. MIMESA ANTENNATA. B.M.

Female. Length 4½ lines.—Black: the head smooth and slightly shining; the face and mandibles densely covered with silvery pubescence; the clypeus produced, with an obtuse tooth in the middle; the mandibles ferruginous at their apex; the antennæ longer than the thorax; the flagellum very slender at the base and much thickened at the apex; the cheeks armed with stout curved spines. Thorax smooth and shining; the metathorax rounded behind, with a central impressed line in the middle which runs upwards to the verge of the truncation; wings hyaline, slightly clouded at their apex; the pectus and femora beneath covered with glittering silvery pubescence. Abdomen: the petiole narrowed towards the base; the abdomen very smooth and shining; the apical segment margined at the sides, and covered with scattered punctures and short glittering hairs.

The male closely resembles the female, but has the antennæ less thickened at the apex.

Hab. Sandwich Islands.

Genus 10. DIODONTUS.

Crabro, pt., *Fabr. Ent. Syst.* ii. 293 (1793).
Pemphredon, pt., *Fabr. Syst. Piez.* 314 (1804).

Stigmus, *Latr. Gen. Crust. et Ins.* iv. 84 (1806).
Cemonus, *Jurine, Hym.* 214 (1807).
Diodontus, *Curtis, Brit. Ent.* ii. 496 (1836).

1. DIODONTUS MINUTUS. B.M.

Crabro minutus, *Fabr. Ent. Syst.* ii. 302. 32.
Pemphredon minutus, *Fabr. Syst. Piez.* 316. 9.
Van d. Lind, Obs. ii. 78. 2.
St. Farg. Hym. iii. 96. 2 ♀ (non ♂).
Sphex pallipes, *Panz. Faun. Germ.* 52. 22?
Cemonus minutus, *Jurine, Hym.* 214.
Stigmus minutus, *Latr. Gen. Crust. et Ins.* iv. 84.
Diodontus minutus, *Curtis, Brit. Ent.* fol. 496.
Shuck. Foss. Hym. 185. 1.
Dahlb. Hym. Europ. i. 252. 152.
Wesm. Hym. Foss. Belg. 121. 2.

Hab. Britain; France; Germany; Italy; Belgium; Sweden; Denmark.

2. DIODONTUS TRISTIS. B.M.

Pemphredon tristis, *Van d. Lind, Obs.* ii. 76. 1.
Diodontus tristis, *Shuck. Foss. Hym.* 187. 3.
Dahlb. Hym. Europ. i. 249. 149.
Wesm. Hym. Foss. Belg. 120. 1.
Diodontus pallipes, *Dahlb. Hym. Europ.* i. 250. 151.

Hab. Britain; Germany; Belgium; Sweden.

3. DIODONTUS LUPERUS. B.M.

Diodontus luperus, *Shuck. Foss. Hym.* 186. 2.
Dahlb. Hym. Europ. i. 254. 153.

Hab. Britain; Germany.

4. DIODONTUS MEDIUS.

Diodontus medius, *Dahlb. Hym. Europ.* i. 250. 150.

Hab. Sweden.

Genus 11. CERATOPHORUS.

Pemphredon, *Van d. Lind, Obs.* ii. 82 (1829).
Ceratophorus, *Shuck. Foss. Hym.* 198 (1837).

1. CERATOPHORUS MORIO. B.M.

Pemphredon, *Van d. Lind, Obs.* ii. 82. 5 ♀ ♂.
Shuck. Foss. Hym. 198. 3.
Ceratophorus morio, *Shuck. Foss. Hym.* (note) 198.
Dahlb. Hym. Europ. i. 256. 57.
Wesm. Hym. Foss. Belg. 118. 1.

Hab. Britain; Belgium; Sweden.

2. CERATOPHORUS ANTHRACINUS.

Ceratophorus anthracinus, *Smith, Zool. App.* ix. 126.

Hab. Britain (Devon).

Genus 12. CEMONUS.

Pemphredon, pt., *Latr. Gen. Crust. et Ins.* iv. 84 (1806).
Cemonus, *Jurine, Hym.* 214 (1807).

1. CEMONUS UNICOLOR. B.M.

Pemphredon unicolor, *Latr. Gen. Crust. et Ins.* iv. 84.
St. Farg. & Serv. Encycl. Méth. x. 48. 3.
Van d. Lind, Obs. ii. 83. 6.
Zett. Ins. Lapp. 441. 2.
Curtis, Brit. Ent. xiv. t. 632.
Cemonus unicolor, *Jurine, Hym.* 214 (2nd Fam. note, without the synonyms).
Shuck. Foss. Hym. 200. 1 ♂ ♀.
Dahlb. Hym. Europ. i. 255. 155.
St. Farg. Hym. iii. 94. 2.
Wesm. Hym. Foss. Belg. 119. 1.

Hab. Britain; France; Germany; Belgium; Lapland.

2. CEMONUS LETHIFER. B.M.

Cemonus lethifer, *Shuck. Foss. Hym.* 201. 2 ♀ ♂.
Dahlb. Hym. Europ. 254. 154.
Wesm. Hym. Foss. Belg. 119. 3.

Hab. Britain; Portugal; Belgium; Sweden.

3. CEMONUS RUGIFER.

Cemonus rugifer, *Dahlb. Hym. Europ.* i. 256. 156; *Synop. Spec.* 507. 3? ♀ ♂.
Wesm. Hym. Foss. Belg. 119. 2.

Hab. Belgium; Sweden; Silesia.

4. CEMONUS PARALLELUS.

Stigmus parallelus, *Say, Bost. Journ.* i. 378. 1.

Hab. Mexico.

5. CEMONUS FRATERNUS.

Stigmus fraternus, *Say, Narr. Exped. St. Peter's River, Append.* p. 73.

Hab. Pennsylvania.

6. CEMONUS PUSILLUS.

Cemonus? pusillus, *Say, Bost. Journ.* i. 378. 2.

Hab. N. America (Indiana).

7. CEMONUS INORNATUS. B.M.

Cemonus inornatus, *Say, Narr. Exped. St. Peter's River, Append.* p. 73. 2.

Hab. Pennsylvania. (Coll. E. Doubleday, Esq.)

Genus 13. PSEN.

Psen, *Latr. Précis* (1796).
Sphex, pt., *Fabr. Ent. Syst. Supp.* 243 (1798).
Pelopœus, pt., *Fabr. Syst. Piez.* 202 (1804).
Trypoxylon, pt., *Fabr. Syst. Piez.* 180 (1804).

1. PSEN ATER. Pl. X. fig. 2. B.M.

Sphex atra, *Fabr. Ent. Syst. Supp.* 244. 18. 19.
Panz. Faun. Germ. 72. 7.
Pelopœus unicolor, *Fabr. Syst. Piez.* 204. 10.
Pelopœus compressicornis, *Fabr. Syst. Piez.* 204. 11 ♂ ♀.
Trypoxylon atratum, *Fabr. Syst. Piez.* 182. 5 ♀.
Psen atra, *Panz. Krit. Revis.* ii. 108.
Psen pallipes, *Spin. Ins. Lig.* i. 94. 2.
Psen serraticornis, *Jurine, Hym.* t. 8. gen. 6 ♂.
Psen ater, *Van d. Lind, Obs.* ii. 102. 1.
Latr. Hist. Nat. xiii. 300?
Shuck. Foss. Hym. 225. 1.
St. Farg. Hym. iii. 40. 1.
Mimesa atra, *Dahlb. Hym. Europ.* i. 2. 3.
Mesopora ater, *Wesm. Hym. Foss. Belg.* 116. 6.

Hab. Britain; France; Italy; Germany; Belgium; Scandinavia.

M. Wesmael has proposed the removal of this species from the genus *Psen*, in consequence of a difference in the neuration of the posterior wings. Throughout this catalogue the determination of the genera has been established on the neuration of the anterior wings in connexion with other characters.

2. PSEN PALLIPES. B.M.

Sphex pallipes, *Panz. Faun. Germ.* 52. 22 ♂.
Trypoxylon atratum, *Panz. Faun. Germ.* 98. 15.
Psen atra, *Panz. Krit. Revis.* ii. 109.
Psen atratus, *Van d. Lind, Obs.* ii. 103. 2.
Shuck. Foss. Hym. 227. 2.
Dahlb. Hym. Europ. i. 5. 6.
St. Farg. Hym. iii. 40. 1.
Wesm. Hym. Foss. Belg. 116. 1.

Hab. Britain; France; Germany; Belgium; Sweden; Finland.

3. PSEN FUSCIPENNIS.

Psen fuscipennis, *Dahlb. Hym. Europ.* i. 5. 7 ♀.

Hab. Scandinavia.

4. PSEN MEDIUS. B.M.

Male. Length 3 lines. — Head black, closely punctured; the face covered with silvery pubescence; the mandibles and flagellum beneath rufo-fulvous. Thorax black, strongly punctured, the punctures confluent in the middle of the disk; the metathorax very coarsely rugose; the sides and beneath the thorax with a short glittering pubescence; the tubercles, tegulæ, extreme base of the wings, anterior and intermediate legs, and the posterior tibiæ and tarsi, rufo-fulvous; the intermediate femora with a dark stain beneath; the wings hyaline and beautifully iridescent. Abdomen black, with the apical margin of the first segment and the second entirely red; the petiole wider at its extremity than at its base; the apical margins of the third and following segments rufo-piceous; the entire abdomen has a thin silky pile; beneath, coloured the same as above.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

This insect has exactly the appearance of *M. bicolor*, but it differs considerably from it in sculpture, and the neuration of its wings is that of *Psen*: it appears to form a connecting link between the two genera.

5. PSEN CONCOLOR.

Psen concolor, *Dahlb. Hym. Europ.* i. 6. 8.

Hab. Gothland.

Genus 14. CERCERIS.

Sphex, pt., *Linn. Faun. Suec.* no. 1660 (1761).
Crabro, pt., *Fabr. Syst. Ent.* 374 (1775).
Vespa, pt., *Harris, Expos.* 127 (1776).
Philanthus, pt., *Fabr. Ent. Syst.* ii. 288 (1793).
Cercēris, *Latr. Hist. Nat. Crust. et Ins.* xiii. (1804).
Diamma & Didesmus, *Dahlb. Hym. Europ.* i. 225 & 502 (1843-5).

1. CERCERIS ARENARIA. B.M.

Sphex arenaria, *Linn. Fn. Suec.* 413. 1660; *Syst. Nat.* i. 946. 31 ♀.
Villers, Ent. iii. 235. 38.
Vespa exultus & petulans, *Harris, Expos.* t. 37. f. 1. 2 ♂ ♀.
Crabro 5-cinctus, *Fabr. Mant.* i. 295. 11 ♂.
Oliv. Encycl. Méth. vi. 514. 13.
Schrank, Faun. Boic. ii. 335. 2182.
Crabro arenarius, *Fabr. Mant.* i. 297. 20.
Philanthus arenarius, *Fabr. Ent. Syst.* ii. 290. 5; *Syst. Piez.* 303. 9.
Philanthus lætus, *Fabr. Ent. Syst.* ii. 291. 10; *Syst. Piez.* 305. 18.
Panz. Faun. Germ. 63. 11.
Cerceris aurita, *Fabr. Ent. Syst. Supp.* 268. 1.
Latr. Hist. Nat. xiii. 315. 1.
Spin. Ins. Ligur. i. 96. 1.
Cerceris læta, *Curtis, Brit. Ent.* vi. fol. 269. t. 269 ♀.
Cerceris arenaria, *Van d. Lind, Obs.* ii. 109. 3.
Shuck. Foss. Hym. 233. 1.
Dahlb. Hym. Europ. 205. 122.
St. Farg. Hym. iii. 16. 11.
Wesm. Hym. Foss. Belg. 100. 1.

Hab. Britain; France; Italy; Germany; Austria; Belgium.

2. CERCERIS ORNATA. B.M.

Philanthus ornatus, *Fabr. Ent. Syst.* ii. 290. 6; *Syst. Piez.* 304. 11.
Panz. Faun. Germ. 63. 10; *Krit. Revis.* ii. 174.
Crabro variabilis, *Schrank, Faun. Boic.* ii. 339. 2190.
Philanthus semicinctus, *Panz. Faun. Germ.* 47. 24.
Cerceris ornata, *Latr. Hist. Nat.* xiii. 317. 3; *Nouv. Dict.* ed. 2. v. 512.

Cerceris ornata, *Walck. sur le genre Halict.* 80.
Van d. Lind, Obs. ii. 117. 13.
Shuck. Foss. Hym. 239. 4.
Wesm. Hym. Foss. Belg. 105. 6.
Cerceris variabilis, *Dahlb. Hym. Europ.* i. 196. 118.

Hab. Britain; France; Germany; Belgium; Sweden; Finland; Scandinavia; Algeria.

3. CERCERIS INTERRUPTA. B.M.

Crabro 5-fasciatus, *Rossi, Faun. Etrus. Mant.* i. 139. 207?
Philanthus quinquecinctus, *Panz. Faun. Germ.* 63. 12 ♂, nec *Fabr.*
Philanthus interruptus, *Panz. Faun. Germ.* 63. 17 ♀.
Philanthus ruficornis, *Fabr. Ent. Syst.* ii. 292. 11?
Cerceris 5-fasciata, *Van d. Lind, Obs.* ii. 115. 9 (teste *Wesm.*).
Wesm. Hym. Foss. Belg. 103. 4.
Cerceris interrupta, *Shuck. Foss. Hym.* 238. 3.
St. Farg. Hym. iii. 7. 4.
Cerceris nasuta, *Dahlb. Hym. Europ.* i. 215. 128.
Cerceris subdepressa, *St. Farg. Hym.* iii. 12. 7?

Hab. Britain; France; Italy; Germany; Belgium; Sweden.

4. CERCERIS LABIATA. B.M.

Crabro labiatus, *Fabr. Ent. Syst.* ii. 296. 11 ♀.
Crabro cunicularius, *Schrank, Faun. Boic.* ii. 335. 2183.
Crabro bidens, *Schrank, Faun. Boic.* ii. 335. 2183.
Philanthus labiatus, *Panz. Faun. Germ.* 63. 16 ♀.
Fabr. Syst. Piez. 303. 10.
Philanthus arenarius, *Panz. Faun. Germ.* 46. 2 ♂.
Cerceris nasuta, *Latr. Gen. Crust. et Ins.* iv. 94 ♂ ♀.
Cerceris labiata, *Van d. Lind, Obs.* ii. 111. 5.
Shuck. Foss. Hym. 236. 2.
Dahlb. Dispos. 16. 123; *Hym. Europ.* i. 217. 129.
Wesm. Hym. Foss. Belg. 104. 5.

Hab. Britain; France; Italy; Germany; Austria; Belgium; Sweden; Finland.

5. CERCERIS EMARGINATA. B.M.

Philanthus emarginatus, *Panz. Faun. Germ.* 63. 19.
Cerceris variabilis, *Dahlb. Hym. Europ.* i. 196. 118 (var.).

Hab. Britain; Austria; Albania; Sicily.

This species differs so much from all the recorded varieties of

C. ornata, that, without connecting links, it appears to be specifically distinct; several examples from Devonshire are in the Museum, all agreeing in having the legs entirely yellow, dashed with ferruginous, a large ovate macula on the sides of the metathorax, and four yellow emarginate bands on the abdomen; they agree with *C. ornata* in having a semicircular carina at the base of the second segment beneath.

6. CERCERIS SABULOSA. B.M.

Philanthus sabulosus, *Panz. Faun. Germ.* 63. 13 ♂.
Philanthus quadricinctus, *Panz. Faun. Germ.* 63. 15 ♀.
Cerceris fasciata, *Spin. Ins. Ligur.* i. 97. 2 ♀.
Cerceris quadricincta, *Latr. Hist. Nat.* xiii. 316. 2.
Van d. Lind, Obs. ii. 144. 8.
Shuck. Foss. Hym. 243. 5.
Dahlb. Hym. Europ. i. 212. 126 (nec var. β).
St. Farg. Hym. iii. 23. 15.
Lucas, Explo. Sc. Algér. iii. 254.
Wesm. Hym. Foss. Belg. 102. 3.
Cerceris cincta, *Dahlb. Hym. Europ.* i. 204?

Hab. Britain; France; Italy; Sicily; Germany; Belgium.

7. CERCERIS BIDENTATA.

Cerceris bidentata, *St. Farg. Hym.* iii. 9. 5.

Hab. France (Paris).

8. CERCERIS BREVIROSTRIS.

Cerceris brevirostris, *St. Farg. Hym.* iii. 13. 8.

Hab. France (Paris).

9. CERCERIS BUPRESTICIDA.

Cerceris bupresticida, *Dufour, Ann. des Sci. Nat. Zool.* 2nd ser. xv. 370. t. 11. f. 1 ♀.
Dahlb. Hym. Europ. Synop. Spec. i. 498.

Hab. South of France; Spain.

10. CERCERIS FRONTALIS.

Cerceris argentifrons, *St. Farg. Hym.* iii. 25. 17 ♂ ♀ (nec *Guér.*).

Hab. France (St. Sévres).

This is probably only a variety of *C. ornata*.

11. CERCERIS MINUTA.

Cerceris minuta, *St. Farg. Hym.* iii. 27. 18 ♂ ♀.

Hab. France (St. Sévres).

12. CERCERIS TUBERCULATA. B.M.

Sphex tuberculata, *Vill. Ent.* iii. 253. 95.
Philanthus rufipes, *Fabr. Ent. Syst.* ii. 290. 4; *Syst. Piez.* 303. 8.
Cerceris vespoides, *Illig. Faun. Etrus. Mant.* ii. 133. 859.
Cerceris major, *Spin. Ins. Ligur.* ii. 50. t. 1. f. 2 *a. b* ♀, *c* ♂.
Germ. Faun. Europ. 12. 22.
Drap. Ann. Sc. Phys. i. 297. 24.
Cerceris tuberculata, *Germ. Reise n. Dalm.* 281. 354.
Van d. Lind, Obs. ii. 108. 2.
Dahlb. Hym. Europ. i. 220. 131.
St. Farg. Hym. Europ. iii. 10. 6.

Hab. France; Italy; Dalmatia; Albania; Belgium; Spain.

13. CERCERIS FARGEII.

Cerceris Dufourii, *St. Farg. Hym.* iii. 14. 9 ♀ (nec *Guér.*).

Hab. France (St. Sévres).

14. CERCERIS FERREI. B.M.

Cerceris Ferrei, *Van d. Lind, Obs.* ii. 112. 6 ♀.
St. Farg. Hym. iii. 4. 2 ♂ ♀.
Dahlb. Hym. Europ. i. 219. 103.

Hab. South of France; Albania.

15. CERCERIS NITIDA.

Cerceris nitida, *Wesm. Hym. Foss. Belg.* 100. 2 ♀.

Hab. Belgium.

16. CERCERIS HORTORUM. B.M.

Cerceris hortorum, *Panz. Faun. Germ.* 63. 9.

Hab. Germany; Dalmatia.

This may probably be a mere variety of *C. emarginata*. Some specimens of the female from Dalmatia have merely a lateral yellow square spot on the third segment of the abdomen and a minute one on the fifth, the latter frequently obsolete.

17. CERCERIS ANNULATA. B.M.

Crabro annulatus, *Rossi, Faun. Etrus. Append.* 123. 109.
Vespa annulata, *Rossi, Faun. Etrus.* (ed. *Illig.*) ii. 145. 874.
Cerceris annulata, *Van d. Lind, Obs.* ii. 115. 10.
Dahlb. Hym. Europ. i. 214. 127.

Hab. Italy.

18. CERCERIS ALBO-FASCIATA.

Crabro albo-fasciata, *Rossi, Faun. Etrus. Mant.* ii. 138. 306.
Vespa albo-fasciata, *Rossi, Faun. Etrus.* (ed. *Illig.*) ii. 143.
Cerceris albo-fasciata, *Van d. Lind, Obs.* ii. 116. 12.
Dahlb. Hym. Europ. i. 201. 119.
Cerceris tricincta, *Spin. Ins. Ligur.* i. 27. 11. t. 1. f. 9 ♂.
Van d. Lind, Obs. ii. 116. 11.

Hab. Italy; Tuscany; Prussia.

19. CERCERIS ALBO-NOTATA. B.M.

Cerceris albo-notata, *Spin. Ins. Ligur.* i. 99. 5.
Van d. Lind, Obs. ii. 120. 17.
Dahlb. Hym. Europ. i. 203. 121.

Hab. Italy; Dalmatia; Albania.

20. CERCERIS MODESTA. B.M.

Female. Length 3¼ lines.—Black, closely punctured: the sides of the face, two minute spots on the clypeus (sometimes obsolete), the mandibles and scape in front, pale yellow; the flagellum fulvous beneath; the tips of the mandibles ferruginous. Thorax: a spot on each side of the collar, another on the tegulæ and the post-scutellum, yellowish-white; the subcordiform space at the base of the metathorax punctured; the wings slightly coloured, with a darker cloud at their apical margins, the nervures ferruginous; the anterior femora at their apex in front and the tibiæ and tarsi pale yellow, the posterior tibiæ with a fuscous stain at their apex within. Abdomen: the first segment of the abdomen ferruginous; the third and fifth segments with a large pale yellow macula on each side, pointed within; the spots on the fifth segment uniting or usually subinterrupted.

The male differs in having the face yellow below the antennæ, and in having the basal segment of the abdomen black.

Hab. Albania.

21. CERCERIS FLAVICORNIS. B.M.

Cerceris flavicornis, *Brullé, Expéd. Sc. de Morée*, iii. 373. 824. t. 51. f. 3.

Hab. The Morea; Albania.

22. CERCERIS CAPITATA.

Female. Length 6½–7 lines.—Black, closely punctured: the head wider than the thorax; the clypeus produced at its apex and rounded, not elevated, but curving slightly upwards; a large spot behind the eyes, two small ones on the vertex, the scape in front, a large ovate spot on the clypeus, a small one on each side, the sides of the face as high as the antennæ, and a spot at the base of the mandibles, yellow; the mandibles ferruginous; the flagellum fulvous beneath. Thorax: an interrupted line on the collar, the tegulæ, a minute spot on each side of the scutellum, the post-scutellum, and an angular spot on each side of the metathorax, yellow; the wings slightly coloured, a darker cloud at the apical margins of the anterior pair, the nervures ferruginous; the subcordiform space at the base of the metathorax roughly punctured; the legs of a reddish-yellow, with the tarsi, the tibiæ, and femora in front, yellow; the coxæ rufo-fuscous. Abdomen: the first segment with a yellow spot on each side, the three following with a subinterrupted fascia on their apical margins, widest at the sides; the fifth segment yellow, with an angular black spot in the middle of its base; beneath black, with the middle of the segments rufo-piceous.

Hab. Albania. (Coll. W. W. Saunders, Esq.)

23. CERCERIS TRIFASCIATA. B.M.

Female. Length 5 lines.—Black: the head and thorax strongly punctured; the face, below the insertion of the antennæ, yellow; the margins of the clypeus and the triangular spot above it, black; the mandibles yellow, with their tips black; the basal joints of the flagellum ferruginous beneath, the tip ferruginous. Thorax: the tegulæ black, smooth and shining; the wings slightly coloured, the nervures ferruginous, the anterior margin of the fore-wings clouded towards their apex; the anterior and intermediate tibiæ and tarsi yellow, the latter slightly ferruginous; the posterior tibiæ and tarsi ferruginous. Abdomen punctured, the two basal segments strongly so, the three following much more finely so and shining; the apex of the fifth and the sixth strongly punctured; the second, third and fourth segments with a narrow

yellow fascia on their apical margins, slightly attenuated in the middle.

Hab. Polish Ukraine.

24. CERCERIS RUFIPES. B.M.

Female. Length 6 lines.—Black, strongly punctured: an ovate spot above the clypeus, opposite to which, on each side of the face, touching the orbit of the eyes, a larger spot, and a very minute one at the base of the clypeus, yellow; a minute yellow spot behind the eyes. Thorax: a yellow spot on the tegulæ in front; the wings fusco-hyaline; the legs ferruginous, the posterior tibiæ and tarsi dashed with yellow. Abdomen: a small yellow spot on each side of the first segment; a narrow yellow band on the second, third and fourth segments, very slightly interrupted and narrowed in the middle, and a broader one on the fifth, slightly narrowed in the middle; beneath, immaculate.

Hab. Polish Ukraine.

25. CERCERIS CITRINELLA. B.M.

Female. Length 4½ lines.—Pale yellow, thickly and strongly punctured: a transverse black stripe between the eyes, enclosing the ocelli, from which two narrower lines run downwards to the insertion of the antennæ; the tips of the mandibles rufo-piceous. The prothorax black anteriorly; the mesothorax with three longitudinal black stripes which unite with a transverse one at the base; a black spot behind the tegulæ; the wings hyaline, their nervures pale ferruginous; the posterior legs with ferruginous stains. Abdomen: the apical and basal margins of the segments narrowly and slightly ferruginous, the apical segment entirely so; beneath, the apical margins only ferruginous.

Hab. Siberia.

26. CERCERIS FLAVIVENTRIS.

Cerceris flaviventris, *Van d. Lind, Obs.* ii. 107. 1.
Dahlb. Hym. Europ. i. 195. 117.

Hab. Spain.

27. CERCERIS CONCINNA.

Cerceris concinna, *Brullé, Hist. Nat. Il. Canar.* iii. 90. 48.

Hab. Canary Islands.

28. CERCERIS SEMIRUFA. B.M.

Female. Length 5¼ lines.—Black: the head not very strongly

or thickly punctured; the antennæ ferruginous, with the apical half of the flagellum fuscous above; the face below the antennæ yellow; the margins of the clypeus and the carina above, black; the mandibles yellow, with their tips rufo-piceous. Thorax delicately punctured, the metathorax more strongly so; the collar with an interrupted stripe, the tegulæ, scutellum and post-scutellum, yellow; the wings hyaline, the nervures ferruginous; the legs ferruginous. Abdomen: the three basal segments rufous, the three apical ones black; the first segment punctured at the base, the intermediate segments nearly impunctate, the apical ones sparingly punctured; the apical margins of the third, fourth and fifth segments with a narrow pale yellow fascia, slightly attenuated in the middle; a spot on the margin of the second segment, laterally.

Hab. Siberia.

29. CERCERIS TRUNCATULA.

Cerceris truncatula, *Dahlb. Hym. Europ.* i. 210. 124 (var. interrupta?).

Hab. Sweden.

This is probably a mere variety of *C. interrupta*: the females sometimes have the clypeus slightly elevated.

30. CERCERIS SPINIPECTUS. B.M.

Female. Length 8 lines.—Head yellow, with the cheeks beneath and the maxillæ black; a black spot on the vertex touching the orbit of the eyes, its hinder margin curved; in front are two black lines emanating from it and running down to the base of each antenna; two obliquely placed spots behind the posterior stemmata; the tips of the mandibles black. Thorax black; the collar, tubercles, two spots beneath the wings, the tegulæ, scutellum and post-scutellum, and a large ovate macula on each side of the metathorax, yellow; wings hyaline, a fuscous cloud occupying the marginal cell, extending a little beneath it and passing round the apical margins of the wings, the nervures pale rufo-testaceous; the mesosternum swollen and produced laterally, where it is armed with a spine in the middle, and a second at its postero-apical margin; the legs orange-yellow. Abdomen yellow, the extreme basal margin of the segments black; beneath, immaculate:—the entire insect strongly punctured.

Male. Length 6 lines.—Very closely resembles the other sex,

but the basal margins of the abdomen are merely rufo-piceous, not black.

Hab. Trebizond.

This species closely resembles the *C. pulchella* of Klug, but is at once distinguished by having the anterior margin of the clypeus rounded; in *C. pulchella* it is emarginate its entire width.

31. CERCERIS INSULARIS.

Female. Length 6 lines.—Black: the face and mandibles reddish-yellow, the tips of the latter rufo-piceous; a large ferruginous spot beneath the wings; the scape yellow, the flagellum fulvous towards the base. Thorax: a broad stripe on the collar, a lunate spot beneath the wings, with a minute one beneath it, the tegulæ, hinder margin of the scutellum, the post-scutellum, and the sides of the metathorax, yellow; the subcordate space at the base of the metathorax longitudinally striated; wings fulvo-hyaline, a faint cloud occupying the marginal cell and extending to the apex of the wings. Abdomen: the apical margins of the segments with yellow marginal bands; the first and second notched in the middle, the third and fourth widely emarginate; the fifth segment yellow, with an angular black spot in the middle of its base: beneath, rufo-piceous; a broad, yellow, slightly interrupted band in the middle of the second, third and fourth segments; two minute yellow spots on the fifth segment.

Hab. Sicily. (Coll. F. Smith.)

32. CERCERIS INSIGNIS.

Cerceris insignis, *Klug, Symb. Phys.* dec. v. t. 47. f. 12 ♀.

Hab. Arabia.

33. CERCERIS VIDUA.

Cerceris vidua, *Klug, Symb. Phys.* dec. v. t. 47. f. 11 ♂.

Hab. Arabia.

34. CERCERIS DISPAR.

Cerceris dispar, *Dahlb. Hym. Europ. Synop. Spec.* i. 499. 9.

Hab. Egypt.

35. CERCERIS ERYTHROCEPHALA.

Cerceris erythrocephala, *Dahlb. Hym. Europ. Synop. Spec.* 502. 27.

Hab. Egypt.

36. CERCERIS EXCELLENS.

Cerceris excellens, *Klug, Symb. Phys.* dec. v. t. 47. f. 15 ♂.
Hab. Lower Egypt (Sakkara).

37. CERCERIS HISTRIO.

Cerceris histrio, *Dahlb. Hym. Europ. Synop. Spec.* i. 499. 11.
Hab. Egypt.

38. CERCERIS HISTRIONICA.

Cerceris histrionica, *Klug, Symb. Phys.* dec. v. t. 47. f. 9 ♂ ♀.
Hab. Lower Egypt (Sakkara).

39. CERCERIS KLUGII.

Cerceris annulata, *Klug, Symb. Phys.* dec. v. t. 47. f. 13 ♂ (nec *Rossi*).
Hab. Egypt.

40. CERCERIS PULCHELLA. B.M.

Cerceris pulchella, *Klug, Symb. Phys.* dec. v. t. 47. f. 14 ♂.
Hab. Egypt. (Coll. F. Smith.)

41. CERCERIS SOLITARIA.

Cerceris solitaria, *Dahlb. Hym. Europ. Synop. Spec.* i. 502. 26.
Hab. Egypt.

42. CERCERIS ALBICINCTA.

Cerceris albicincta, *Klug, Symb. Phys.* dec. v. t. 47. f. 10 ♂.
Hab. Ethiopia (Ambukohl).

43. CERCERIS ABDOMINALIS. B.M.

Philanthus abdominalis, *Fabr. Ent. Syst.* 306. 24.
Cerceris rufiventris, *St. Farg. Hym.* iii. 29. 20.
Lucas, Explo. Sc. Algér. iii. 255. t. 13. f. 3.
Hab. Tangiers; Algeria (Oran).

This species is subject to considerable variation in the markings; the head is frequently immaculate as well as the abdomen.

44. CERCERIS CAPITO. B.M.

Cerceris capito, *St. Farg. Hym.* iii. 15. 10 ♂ ♀.
Lucas, Explo. Sc. Algér. 251. t. 12. 9.

Hab. Algeria (Oran).

45. CERCERIS CLITELLATA.

Cerceris clitellata, *St. Farg. Hym.* iii. 28. 19.
Lucas, Explo. Sc. Algér. iii. 255. t. 13. f. 2.

Hab. Algeria (Oran).

46. CERCERIS FASCIATA. B.M.

Cerceris fasciata, *St. Farg. Hym.* iii. 30. 21.
Lucas, Explo. Sc. Algér. iii. 256. t. 13. f. 6.

Hab. Algeria (Oran).

47. CERCERIS FOVEATA.

Cerceris foveata, *St. Farg. Hym.* iii. 31. 22.
Lucas, Explo. Sc. Algér. iii. 257. t. 13. f. 5.

Hab. Algeria (Oran).

48. CERCERIS LATICINCTA. B.M.

Cerceris laticincta, *St. Farg. Hym.* iii. 18. 12 ♂.
Lucas, Explo. Sc. Algér. iii. 252. t. 12. f. 10.

Hab. Algeria (Oran).

49. CERCERIS LINDENII.

Cerceris Lindenii, *St. Farg. Hym.* iii. 19. 13.
Lucas, Explo. Sc. Algér. iii. 253. t. 12. f. 11.

Hab. Algeria (Oran).

50. CERCERIS NASUTA. B.M.

Cerceris nasuta, *St. Farg. Hym.* iii. 6. 3 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 250. t. 12. f. 8.

Hab. Algeria; Port Natal.

51. CERCERIS VITTATA.

Cerceris vittata, *St. Farg. Hym.* iii. 24. 16 ♀.
Lucas, Explo. Sc. Algér. iii. 254. t. 13. f. 1.

Hab. Algeria (Oran).

52. CERCERIS BICOLOR.

Female. Length 5¼ lines.—The head and thorax black, the legs and abdomen ferruginous; the head and thorax closely but not coarsely punctured; the clypeus elevated from its base, convex above, with a transverse yellow spot; the sides of the face and the carina between the antennæ, yellow; the basal half of the mandibles and a minute spot behind the eyes, yellow; a spot on each side of the collar, and another on the tegulæ, yellow; wings dark fuscous, with a violet iridescence. The abdomen sparingly punctured, an indistinct yellow line on the apical margin of the first segment.

Hab. The Gambia. (Coll. F. Smith.)

53. CERCERIS TYRANNICA.

Female. Length 5 lines.—Black and punctured: the face and a large spot behind the eyes yellow, the latter forming a tridentate shape above the antennæ; the hinder margin of the vertex ferruginous, with two yellow spots in the middle; the mandibles yellow and also the scape in front; the antennæ ferruginous, tips of the mandibles black. Thorax: the collar, sides of the thorax beneath the wings, the tegulæ, scutellum, post-scutellum and the sides of the metathorax, yellow; wings hyaline, the nervures ferruginous; the apical margins with a dark fuscous cloud; the legs ferruginous, with a large, ovate, yellow macula on each side of the segments, occupying nearly their entire width; the apical segment yellow; the space between the spots on the basal segment black; beneath ferruginous.

Hab. The Gambia. (Coll. F. Smith.)

54. CERCERIS FOSSOR.

Male. Length 5 lines.—Head and thorax black, coarsely punctured; the face ferruginous, with a yellow spot on the anterior margin of the clypeus, and a smaller one at the anterior angles of the face; the scape yellow in front; the mandibles yellow, with their apex rufo-piceous. Thorax: an interrupted line on the collar, a spot on the tegulæ in front, the post-scutellum, and a minute spot on each side of the metathorax, yellow; wings fusco-hyaline, with a purple iridescence, the subcordate space at the base of the metathorax transversely striated, the metathorax swollen at the sides; a yellow spot at the apex of the anterior femora outside; the tibiæ and tarsi yellow, the apical joints of the latter slightly ferruginous; the intermediate legs have the apex of the coxæ, the trochanters, the tibiæ and tarsi yellow; the posterior legs, with the coxæ, trochanters, and

base of the femora, yellow. Abdomen ferruginous; the basal segment black, with a narrow yellow line on the apical margin.

Hab. The Gambia. (Coll. F. Smith.)

55. CERCERIS FLAVIFRONS.

Male. Length 4½ lines.—Head and thorax black, closely punctured; the face, scape in front, and the mandibles pale yellow; a minute yellow spot behind the eyes; the flagellum fulvous towards the base. Thorax: an interrupted line on the collar, a spot on the tegulæ in front, two spots on the scutellum, the post-scutellum, and a large oblong macula on each side of the metathorax and the legs, yellow; the femora above rufo-piceous, the tarsi and the posterior tibiæ slightly ferruginous; the wings fusco-hyaline, with a violet iridescence. Abdomen pale ferruginous, with a yellow line on the posterior margin and at the sides.

Hab. West Africa. (Coll. F. Smith.)

56. CERCERIS PERBOSCII.

Cerceris Perboscii, *Guér. Icon. Règ. Anim.* 444.

Hab. Senegal.

57. CERCERIS PICTA.

Cerceris picta, *Dahlb. Hym. Europ.* i. 222.

Hab. Senegal.

58. CERCERIS FULVIVENTRIS.

Cerceris fulviventris, *Guér. Icon. Règ. Anim.* p. 444; *Voy. Abyss. Lefeb.* vi. 358.

Hab. Senegal; Abyssinia; Gambia. (Coll. F. Smith.)

59. CERCERIS LUXURIOSA.

Cerceris luxuriosa, *Dahlb. Hym. Europ. Synop. Spec.* i. 498.

Hab. Abyssinia (Syrkut).

60. CERCERIS SYRKUTI.

Cerceris Syrkuti, *Dahlb. Hym. Europ. Synop. Spec.* i. 502. 28.

Hab. Syrkut (Abyssinia?).

61. CERCERIS FORMOSA. B.M.

Cerceris formosa, *Dahlb. Hym. Europ. Synop. Spec.* 499. 12.

Hab. Port Natal.

62. CERCERIS RAPTOR. B.M.

Female. Length 4 lines.—Black and punctured; the clypeus, sides of the face, the carina between the antennæ, the scape in front, and the mandibles, yellow; the flagellum fulvous beneath. Thorax: a spot on each side of the collar, another in front of the tegulæ, and the post-scutellum, yellow; the anterior and intermediate femora yellow beneath, except at their base; the tibiæ and tarsi yellow, a black spot at the tip of the posterior tibiæ within, and the four apical joints of the tarsi fuscous; wings hyaline, with a black spot at the apex of the anterior pair. Abdomen: a transverse yellow spot at the base of the second segment; the third segment yellow, with a deep emargination in front; the fifth segment yellow, with a similar emargination to that of the fifth segment; the third segment beneath yellow at the sides, and the apical margin with a narrow yellow band.

Hab. West Africa (Whydah).

This species very closely resembles the *C. ornata*, but is more deeply punctured, and is at once distinguished by the black spot on the wings: otherwise they approach very closely.

63. CERCERIS RIGIDA. B.M.

Male. Length 4 lines.—Black: the face below the antennæ, the scape in front and the mandibles, yellow; the scape above and the flagellum rufo-piceous. Thorax and abdomen covered with large deep confluent punctures; the post-scutellum, a spot on the tegulæ in front, and another on each side of the metathorax, yellow; the wings hyaline, with a dark cloud at their apical margins; the legs yellow, the anterior and intermediate femora with a black stripe at their base above, the posterior femora and tibiæ black above, with their base and apex rufo-piceous, the posterior tarsi rufo-piceous. Abdomen: the basal segment with a spot on each side, the following segment with an interrupted yellow line on its apical margin, the fourth and fifth usually entire.

Hab. Port Natal.

64. CERCERIS LUNIGERA.

Cerceris lunigera, *Dahlb. Hym. Europ. Synop. Spec.* i. 499.

Hab. Cape of Good Hope.

65. CERCERIS ALBIFRONS.

Male. Length 4 lines.—Black, closely punctured: the face

white; the flagellum fulvous beneath. Thorax: a white spot on the tegulæ in front; the tibiæ and tarsi pale testaceous, the femora rufo-testaceous as well as the posterior tibiæ and tarsi; wings fulvo-hyaline and iridescent. Abdomen: the basal segment ferruginous, the third segment with a narrow white marginal fascia.

Hab. Africa. (Coll. F. Smith.)

66. CERCERIS MILITARIS.

Cerceris militaris, *Dahlb. Hym. Europ.* i. 224.

Hab. Africa.

67. CERCERIS NIGRIFRONS. B.M.

Male. Length 4½ lines.—Black, punctured: the scape in front, a short carina between the antennæ, and two minute spots on the face, yellow; the flagellum beneath, and the mandibles ferruginous, the apex of the former fuscous. Thorax coarsely punctured; the tegulæ yellow in front; the wings slightly coloured, with a fuscous cloud at their apical margins, that on the fore wings occupying the marginal cell, and darkest from thence to the apex of the wing; the legs ferruginous, with the anterior and intermediate tibiæ in front, and the basal joint of the tarsi pale testaceous; the tibiæ have a dark fusco-ferruginous stain behind; the apical joints of the tarsi fuscous above. Abdomen: the basal segment ferruginous; the second narrowed at the base, the third with a yellow band at its apical margin, the sixth entirely yellow; beneath, the second segment shining, with large scattered punctures; the following segments have some coarse punctures at the sides; the third has a yellow band at its apical margin.

Hab. Africa.

68. CERCERIS ARGENTIFRONS.

Cerceris argentifrons, *Guér. Icon. Règ. Anim.* 445.

Hab. Madagascar.

69. CERCERIS NIGRO-CINCTA. B.M.

Female. Length 5 lines.—Black: the head, thorax, and basal segment of the abdomen, coarsely punctured; the second, third and fourth segments more finely and distantly punctured; the fifth more strongly so, as well as the sides of the sixth segment; the latter transversely rugose above. The clypeus, a large spot on each side of the face, and the scape in front, yellow, some-

times of an orange colour; the flagellum fulvous beneath; the mandibles of a reddish-yellow, with their tips rufo-piceous. Thorax: a spot on each side of the collar, the tegulæ, post-scutellum, and legs, orange; the second segment of the abdomen, the fourth and following segments orange; the first and third black.

Hab. Australia (Adelaide).

70. CERCERIS ANTIPODES. B.M.

Female. Length 4 lines.—Black, punctured: the clypeus, sides of the face, the mandibles, and the carina between the antennæ, yellow; the flagellum fulvous beneath; a minute yellow spot behind the eyes. Thorax immaculate; the tegulæ fulvous; the wings slightly coloured with a fuscous cloud at the anterior margin of the superior pair towards their apex; the nervures ferruginous; the legs fulvo-ferruginous; the basal joint of the intermediate tarsi yellow; the posterior pair slightly fuscous; the coxæ and base of the femora black. Abdomen: the second, fourth and fifth segments of an orange-yellow; the fourth segment more or less black at the base; beneath, the base of the segments rufo-piceous.

Male.—This sex differs in having the scape yellow in front, two minute spots on the vertex, two spots on the collar, two on the scutellum, the post-scutellum, and two minute spots on the metathorax, orange-yellow; the sixth and seventh segments yellow.

Hab. Australia.

71. CERCERIS BIFASCIATA.

Cerceris bifasciata, *Guér. Icon. Règ. Anim.* 443. t. 71. f. 9.

Hab. Bengal.

72. CERCERIS FLAVO-PICTA. B.M.

Female. Length 4–4½ lines.—Head yellow, the vertex black, with a transverse yellow line behind, and a black stripe running downwards to each antenna; the clypeus projecting, the apex truncate; the antennæ ferruginous, with the scape yellow in front; the tips of the mandibles black. Thorax yellow, the disk of the mesothorax black, a black line behind the wings, running downwards obliquely to the posterior coxæ; a central black stripe down the metathorax, the subcordiform space at the base of the metathorax smooth and shining; the wings hyaline, with a dark fuscous spot at the apex of the anterior pair; legs

yellow, the intermediate and posterior pairs slightly stained with ferruginous. Abdomen yellow, the basal margin of the segments black, and a black line running down the middle of the four basal segments, narrowest on the first and fourth; beneath, pale ferruginous, with a yellow macula on each side of the second and two following segments.

The male differs in not having the clypeus elevated, and in being of a paler yellow; the apex of the posterior femora and tibiæ have a fuscous spot, and the bands on the abdomen are very slightly interrupted.

Hab. Northern India.

73. CERCERIS HILARIS. B.M.

Female. Length 5½ lines.—Black and punctured; an oblong spot on each side of the face, a transverse lunate one on the clypeus, which is elevated, and the base of the mandibles, yellow; a yellow spot behind the eyes; the anterior margin of the clypeus deeply emarginate; the scape more or less yellow in front. Thorax: an interrupted line on the collar, a line, or two spots on the scutellum, the post-scutellum, and a large ovate macula on each side of the metathorax, yellow; the wings slightly coloured; the anterior pair with a fuscous cloud at their apical margins; the legs ferruginous. Abdomen: the first segment with a broad emarginate fascia on its apical margin; the four following segments with a narrow yellow fascia on their apical margins; the fascia bordered anteriorly with ferruginous, the second segment almost entirely ferruginous; beneath, similarly coloured, but less brightly.

Hab. Northern India.

73 *a*. CERCERIS INTERSTINCTA.

Crabro interstincta, *Fabr. Ent. Syst. Supp.* 269. 11.
Cerceris interstinctus, *Fabr. Syst. Piez.* 306. 21.

Hab. India.

74. CERCERIS INSTABILIS. B.M.

Female. Length 4½ lines.—Head black and punctured; the hinder margin of the vertex and the cheeks ferruginous; the mandibles, scape in front, face below the antennæ, and the carina between them, yellow; sometimes a line above the carina terminating at the anterior ocellus also yellow; the flagellum ferruginous. Thorax ferruginous; the collar, scutellum, post-scutellum, and the apex of the metathorax more or less, yellow;

the anterior and posterior margins of the mesothorax beneath, black; sometimes a yellow spot beneath the wings; the wings hyaline, with a dark fuscous spot at the apex of the anterior pair, the nervures ferruginous; the legs ferruginous, variegated with yellow. Abdomen ferruginous; a transverse spot at the base of the second segment, the third and fifth segments, yellow; the third segment has sometimes a broad emarginate band, the emargination being black or ferruginous; the extreme base of the segments usually black.

The male closely resembles the female, but the colours are brighter; the mesothorax is usually more or less black; the subcordate space at the base of the metathorax is black in both sexes and striated; the legs are more variegated with yellow and the posterior tibiæ are fuscous at their apex.

Hab. India; China.

This species varies considerably in the colouring, scarcely two individuals being exactly alike; in some examples the vertex is black, with one or two ferruginous stripes; others are entirely ferruginous, with yellow spots and bands.

75. CERCERIS MASTOGASTER. B.M.

Female. Length 6 lines.—Black, punctured: the scapé in front, the clypeus, sides of the face, the carina between the antennæ and the base of the mandibles, yellow; the flagellum fulvous beneath; the head has a thin hoary pubescence, that on the clypeus more bright and silvery. Thorax: a spot on each side of the collar, the post-scutellum, and a spot on the tegulæ, cream-coloured; wings slightly coloured, with a dark cloud or spot beyond the marginal cell; the nervures fusco-testaceous; the tibiæ and tarsi of a yellowish-white, the anterior and intermediate femora at their apex beneath, with a white spot; the posterior femora and coxæ ferruginous; all the tibiæ have a fuscous stain beneath; the metathorax, three basal segments of the abdomen and a spot in the middle of the fourth segment, ferruginous; the subcordate space at the base of the metathorax black, smooth, and shining, with a few striæ at the base; two spots at the base of the second segment of the abdomen and a large one on each side of the third and fifth segments, white: beneath, the third, fourth and fifth segments have on each side a small erect plate, concave within; viewed sideways having the appearance of rows of teats; the segments, except the apical one, ferruginous.

Hab. Madras. (Coll. Walter Elliott, Esq.)

76. CERCERIS ORIENTALIS. B.M.

Female. Length 10½ lines.—Reddish-brown: the tips of the mandibles and the basal margins of the second and three following segments of the abdomen black; the clypeus elevated, deeply and widely emarginate, forming a crescent-shaped appendage; the wings yellow, with a fuscous border to their apical margins; the nervures pale rufo-testaceous.

The male differs in having the mesothorax and also the vertex fuscous, the face reddish-yellow, and the apical joint of the antennæ bent.

Hab. Madras. (Coll. Walter Elliott, Esq.)

77. CERCERIS VIGILANS. B.M.

Male. Length 5–5½ lines.—Head and thorax black, opake; the clypeus and a line above terminating in a point at the anterior ocellus, a broad stripe at the inner orbit of the eyes, yellow; the flagellum ferruginous beneath, the apical joint bent; the vertex and cheeks with a thin hoary pubescence. Thorax: the sides of the thorax, the metathorax and the coxa and femora with thin hoary pubescence; a white stripe on the tibiæ outside, and the basal joint of the intermediate tarsi, white; wings fuscous, with a darker cloud at their apex. Abdomen ferruginous, the basal and two apical joints black; an interrupted broad white fascia on the basal segment.

Hab. Madras. (Coll. Walter Elliott, Esq.)

78. CERCERIS PICTIVENTRIS.

Cerceris pictiventris, *Dahlb. Hym. Europ. Synop. Sp.* i. 498.

Hab. Java.

79. CERCERIS FULIGINOSA. B.M.

Female. Length 6½ lines.—Black, immaculate; the face covered with cinereous pubescence; the head and thorax opake. Thorax rugose, the scutellum longitudinally striated, the striæ punctured; the triangular space at the base of the metathorax obliquely striated; wings dark fuscous, the posterior pair paler. Abdomen slightly shining, not very closely punctured.

Hab. Celebes. (Coll. Madame Ida Pfeiffer.)

80. CERCERIS FEROX.

Female. Length 5½ lines.—Black, the head and thorax closely punctured; the head wider than the thorax, the face widest anteriorly; the clypeus, the carina above it, a large semicircular

spot on each side of the face, the face on each side of the clypeus, the mandibles, and a line on the inner side of the scape, yellow; an ovate spot behind the eyes, and two oblong spots placed obliquely on the vertex, yellow. Thorax: a spot on each side of the collar, another beneath the wings, the margins of the tegulæ, the scutellum, post-scutellum, sides and apex of the metathorax, yellow; the enclosed subcordate space longitudinally striated at the base; the wings slightly coloured, a fuscous cloud on the anterior margin of the superior pair; the legs yellow, a fuscous stripe on the femora above, and on the intermediate and posterior tibiæ behind; the apical joints of the tarsi ferruginous, the posterior pair fusco-ferruginous. Abdomen: the first segment somewhat elongate and deeply punctured; the following segments smooth and shining; a minute yellow spot towards the apex of the first segment above, two placed obliquely at the base of the second, its apical margin with a narrow yellow band, interrupted on each side, the third, fourth and fifth segments with narrow bands on their apical margins which are broadly expanded at the sides of the abdomen; beneath, the second, third and fourth segments with a large angular spot on each side.

Hab. Sumatra. (Coll. F. Smith.)

81. CERCERIS BICORNUTA. B.M.

Female. Length 6 lines.—Black: the clypeus, a tridentate spot above, the mandibles, a line behind the eyes, two minute spots on the vertex, and the scape in front, yellow; the flagellum fulvous beneath; the clypeus elevated, deeply emarginate, forming two horns, rounded at their apex. Thorax: an interrupted line on the collar, a band beneath the wings, which crosses the breast, the tegulæ, two large spots on the scutellum, the post-scutellum, and a large macula on each side of the metathorax, yellow; the wings slightly coloured, with a fuscous cloud extending from the base of the marginal cell to the apex of the wings; the legs yellow, more or less ferruginous above. Abdomen: the sides of the basal segment and a band at the basal margin of the second segment yellow; another on the apical margin, as well as on the apical margins of the three following; beneath, yellow; the apical margins of the segments rufo-testaceous; the apical margin ferruginous.

Hab. North China.

82. CERCERIS FERVIDA. B.M.

Female. Length 8 lines.—Black, closely and strongly punctured; the face below the antennæ yellow; the clypeus produced

and acute in the middle; a yellow spot on the mandibles at their base; the metathorax with a triangular-shaped space at the base in the centre, which is obliquely striated; wings dark fuscous; the legs ferruginous, with a yellow stripe in front of the anterior and intermediate tibiæ and tarsi; the posterior tibiæ serrated exteriorly, and covered with shining pile within. Abdomen: the first, second, and base of the third segment ferruginous; the apical portion of the third segment yellow, with a slight emargination in the middle; the sixth ventral segment armed with an acute spine on each side at the apex.

Hab. North China. (Coll. R. Fortune, Esq.)

83. Cerceris Sinensis. B.M.

Female. Length $4\frac{1}{3}$ lines.—Black: the face below the antennæ, the scape in front, and the mandibles, yellow, the tips of the latter ferruginous; the apex of the clypeus slightly elevated. Thorax: the collar, a spot behind the tubercles, the tegulæ, two spots on the scutellum, the post-scutellum, and an ovate macula on the posterior lateral angles of the metathorax, yellow; wings subhyaline, with a fuscous cloud occupying the marginal cell and extending to the apex of the wing; legs yellow, the base of the coxæ, and of the anterior and intermediate femora, black; the posterior femora black, with their extreme apex yellow; the posterior tibiæ above, except their base, and the tarsi, rufo-piceous. Abdomen: the first segment with a narrow yellow band on its apical margin, the second segment with a large macula at its base, and another smaller spot on each side of its apical margin, the three following segments with a yellow band on their apical margins, yellow; the three bands attenuated in the middle; beneath, the second, third and fourth segments with transverse attenuated yellow bands in the middle; the second segment sometimes yellow, with a dark macula in the middle.

Hab. North China.

84. Cerceris unifasciata. B.M.

Female. Length 4 lines.—Black: the face below the antennæ, the scape in front, and the mandibles, yellow; the flagellum fulvous beneath. Thorax: an obscure line on the collar laterally, a spot on the tegulæ in front, and the post-scutellum, yellow; a minute spot on each side of the metathorax; the wings subhyaline, the apex of the anterior wings with a dark fuscous cloud, which also occupies the marginal cell; the apex of the coxæ, the trochanters, and tips of the femora, the anterior and intermediate

tibiæ and tarsi, yellow; the tibiæ with a ferruginous stain behind. Abdomen: the third segment with a broad yellow band on its apical margin, the margins of the segments narrowly yellow-testaceous; beneath, the apical margins of the segments are yellow.

Hab. North China.

85. CERCERIS ZONALIS. B.M.

Cerceris zonalis, *Smith, Trans. Ent. Soc. Lond.* new ser.

Female. Length 6 lines.—Black and punctured; the scape in front, the face below the antennæ and the mandibles, yellow; the flagellum fulvous beneath; the face with a short thin silvery pubescence. Thorax: the collar and post-scutellum fulvous; the tegulæ pale rufo-testaceous; the wings slightly coloured, with a smoky cloud along the anterior margin of the superior pair; the legs dark rufo-piceous, the joints paler, with the tibiæ and tarsi yellow beneath. Abdomen: the first segment ferruginous, with the base black; the third, with a yellow band on its apical margin and an indistinct one on the fifth, obscure reddish-yellow; the margins of all the segments rufo-piceous above and beneath.

Hab. North China. (Coll. R. Fortune, Esq.)

86. CERCERIS AQUILINA. B.M.

Female. Length 4½ lines.—Black and punctured; the clypeus elevated from its base; the carina between the antennæ much elevated and slightly arched, when viewed sideways in conjunction with the clypeus, forming a kind of beak; the clypeus, sides of the face and the cheeks, pale testaceous, and covered with short silvery pile; the base of the mandibles yellowish, as well as the scape in front; the flagellum ferruginous beneath towards the base. Thorax: the collar, tegulæ in front, the scutellum, two spots on the post-scutellum, and a spot on each side of the metathorax, yellow-testaceous; the wings subhyaline, with a dark fuscous cloud occupying the marginal cell, and extending to the apex of the wing; the anterior and intermediate femora beneath yellowish-white; the tibiæ and tarsi testaceous; the posterior tibiæ testaceous at the base, the tarsi fuscous; the intermediate tibiæ with a dark stain behind. Abdomen: the apical margin of the first, fourth and fifth segments testaceous yellow; the two latter dilated at the sides, the second and apical segments entirely testaceous; the extreme base of the second segment black; the extreme margin of the segments more or less ferruginous; beneath, the margins of the segments

broadly testaceous; the four apical segments distantly punctured.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

87. CERCERIS ATRICEPS. B.M.

Female. Length 5 lines.—Black and punctured; the basal joint of the flagellum obscurely ferruginous beneath; the face covered with silvery pubescence. Thorax: a line on the outer margin of the tegulæ, and the post-scutellum, yellow; the subcordiform space at the base of the metathorax smooth and shining, with an impressed line down the centre; the wings hyaline, with a fuscous stain along the anterior margin of the superior pair; the tibiæ with a testaceous stripe in front, and the posterior femora testaceous at their apex beneath. Abdomen: a narrow orange-yellow band on the apical margin of the third segment; the abdomen is thinly covered with short hoary pile, most observable at the sides and beneath.

Hab. Brazil (Para). (Coll. H. W. Bates.)

88. CERCERIS BASALIS.

Female. Length 5 lines.—Black and strongly punctured; an abbreviated line at the inner orbit of the eyes, and the base of the mandibles, yellow. Thorax: a narrow yellow line on the posterior margin of the scutellum; the tibiæ in front, and the anterior and intermediate tarsi beneath, yellow; the tips of the femora yellow beneath; the wings with a fulvous stain towards their base; a fuscous cloud occupies the first submarginal and the marginal cells, and extends to the apex of the wings, the nervures ferruginous; the subcordate enclosed space at the base of the metathorax coarsely punctured. Abdomen covered with a fine changeable silky pile; the first segment not so narrow as is usual in the genus, and widest at its apex; the third and following segments yellow; the segments beneath with yellow bands on their apical margins; the fifth and sixth yellow.

Hab. Brazil. (Coll. F. Smith.)

89. CERCERIS IMITATOR. B.M.

Male. Length 5 lines.—Head and thorax black and shining, strongly punctured; the scape in front, face and mandibles, yellowish-white; the flagellum pale testaceous towards the base beneath; the collar, tegulæ in front, and two transverse ovate spots in the middle of the metathorax, yellowish-white, the legs beneath are of the same colour; the posterior tarsi fuscous; the

wings hyaline, with a fuscous cloud at their apex. Abdomen ferruginous, with the basal and two apical segments black and strongly punctured, with a short silky pubescence beneath; the first segment with a broad emarginate yellow band on its apical margin; a narrow yellow line on the apical margin of the fifth segment laterally, an uninterrupted one on the sixth, and the sides of the seventh yellow.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

90. CERCERIS INTRICATA. B.M.

Male. Length 5 lines.—Black: the face, scape in front, and the mandibles, yellow; a minute yellow spot behind the eyes, and a large one on the cheeks; the flagellum of a testaceous yellow beneath. Thorax: a minute spot on each side of the collar, a line on each side of the prothorax anteriorly, a spot beneath the wings, a curved line on each side of the pectus, a spot on the tegulæ in front, another on each side of the scutellum, the post-scutellum, a line down the middle of the subcordate space at the base of the metathorax, two ovate spots beneath it, and a minute one on the posterior lateral angles of the metathorax, yellow; wings hyaline, with a broad dark fuscous cloud on the anterior margin of the superior pair; the legs yellow beneath; the anterior and intermediate tarsi yellow, the tips of the joints slightly ferruginous above; the posterior pair black, the joints slightly dilated and bordered with bright silky pile within; the head and sides of the thorax with a thin short cinereous pubescence. Abdomen: the sides and posterior margin of the basal segment yellow; a narrow yellow band on the posterior margins of the four following segments; beneath, the first segment yellow, the second with a spot at the base and one on each side; the following segments are more or less spotted on each side, and thinly covered with silky pubescence.

The male differs in being smaller and in having more yellow on the collar and scutellum; the posterior tibiæ are yellow at their base.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

91. CERCERIS LATRO. B.M.

Female. Length 4 lines.—Black and punctured: the clypeus elevated, forming an obtuse tubercle, rounded above and flattened beneath, the lower or flattened side pale testaceous; the sides of the face, mandibles, and scape beneath, of the same colour; the flagellum fulvous beneath. Thorax: an interrupted narrow line on the collar, a spot on each side of the scutellum, the post-

scutellum, and a stripe on each side of the thorax, yellow; the wings slightly coloured, with a dark fuscous cloud on the anterior margin of the superior pair; the nervures rufo-testaceous, brightest at the base of the wings; the tegulæ ferruginous; the legs fuscous above and yellow beneath; the coxæ and posterior femora fuscous, their apex testaceous; the posterior tarsi fuscous. Abdomen: the apical half of the first segment yellow; the apical margin of the third segment with a narrow yellow band; the apical margins of all the segments very narrowly testaceous; beneath, the margins have a very narrow yellow band.

Hab. Brazil (Para). (Coll. H. W. Bates.)

92. CERCERIS MARGINATA. B.M.

Female. Length 5 lines.—Black: the clypeus, sides of the face as high as the antennæ, a triangular spot above the clypeus, the carina above the antennæ, the mandibles, and scape in front, yellow; the flagellum fulvous beneath; the tips of the mandibles ferruginous. Thorax: the collar transverse, straight, not arched, angulated on each side; the collar, tubercles, two spots on the scutellum, a transverse interrupted line on the post-scutellum, an oblique line on each side of the subcordate space at the base of the metathorax, and a stripe on each side of the metathorax, yellow; the punctures on the metathorax coarse, and running into longitudinal striæ; the subcordate space at the base of the metathorax transversely grooved, with a central longitudinal impressed line which passes downwards to the apex of the metathorax; the metathorax with large deep scattered punctures; the coxæ, trochanters, and femora beneath, yellow; the tibiæ in front, and the anterior and intermediate tarsi, yellow; the apical joints of the intermediate tarsi and the posterior pair fuscous; the wings hyaline, with a fuscous spot at the apex of the externo-medial cell, and a cloud occupying the marginal cell and extending to the apex of the wing. Abdomen strongly but not closely punctured; the sides and apex of the first segment yellow; a yellow band on the apical margin of the third and three following segments; the apical segment entirely yellow, with a black spot in the middle of its base.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

93. CERCERIS RIXOSA. B.M.

Female. Length 4½ lines.—Black and coarsely punctured; the face, scape in front, and the mandibles, yellow; the flagellum fulvous beneath. Thorax: the tegulæ and post-scutellum yel-

low; the subcordate space at the base of the metathorax longitudinally striated; the apex of the coxæ, the intermediate and posterior trochanters, and the apex of the anterior pair, yellow; the anterior and intermediate tibiæ and tarsi yellow, the tibiæ with a dark stain behind; the posterior tibiæ yellow beneath; wings hyaline, the anterior pair with a fuscous cloud at their apex. Abdomen: the third segment yellow, with the extreme base black; the three following segments with a narrow yellow band on their apical margins; a yellow spot on the apical segment at its base.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

94. CERCERIS RUGOSA. B.M.

Female. Length 4 lines.—Black: coarsely punctured, the punctures on the disk of the thorax running into longitudinal striæ, on the abdomen they are large, deep, and confluent; the face, mandibles, and scape in front, yellow; the face covered with silvery pubescence; the flagellum fulvous beneath, the apical joint entirely so. Thorax: a yellow line on the posterior margin of the scutellum; the anterior and intermediate tibiæ in front, and the tarsi, yellow; the posterior femora at their apex in front yellow; the tibiæ and tarsi black; the wings hyaline, a fuscous cloud on the anterior margin of the superior pair. Abdomen: a broad yellow band on the posterior margin of the first segment and a narrow one on that of the third; beneath, a pale lunate spot in the middle of the second segment.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

95. CERCERIS SÆVISSIMA. B.M.

Female. Length 4 lines.—Black and strongly punctured; the face below the antennæ and the mandibles pale testaceous, the tips of the latter ferruginous; the clypeus slightly elevated; the flagellum fulvous beneath. Thorax: a narrow indistinct line on the collar, the tegulæ, two spots on the clypeus, an indistinct narrow line on each side of the subcordiform space at the base of the metathorax, and a narrow line at the sides, of an orange-yellow; the wings slightly coloured, with a dark fuscous cloud on the anterior margin of the superior pair; the tips of the coxæ and trochanters pale testaceous; the anterior and intermediate femora yellow beneath; the posterior pair rufo-testaceous beneath; the anterior tibiæ and tarsi yellow, the tibiæ black above. Abdomen: the apical margin of the basal segment pale testaceous-yellow; the second segment black, the following tes-

taceous-yellow, with the extreme base of the third segment black; beneath, dark rufo-testaceous, with the apical margins of the segments pale testaceous.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

96. CERCERIS SIMPLEX. B.M.

Female. Length 7 lines.—Black, punctured: the clypeus produced in front, obconic, slightly elevated; the flagellum fulvous beneath towards the base; the post-scutellum, a spot on the subcordate space at the base of the metathorax and two elongate spots beneath it, yellow; the legs fusco-ferruginous, brightest beneath; the anterior half of the fore wings dark fuscous, the posterior portion hyaline; the posterior wings slightly coloured. Abdomen: the sides and apical margin of the basal segment yellow; the sides of the abdomen and beneath thinly covered with a fine silky white pubescence.

The male differs in having a yellow line at the inner orbit of the eyes, and a yellow spot on each side of the metathorax, the spot on the subcordate space and also those below it being obsolete.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

97. CERCERIS TRICOLOR. B.M.

Female. Length 5 lines.—Black: the face yellow; the scape in front, the base of the mandibles and a large spot on the cheeks, yellow; the vertex ferruginous, with a large black spot on the front, which encloses the ocelli; the antennæ ferruginous, the flagellum fuscous above towards the apex. Thorax: the collar, a spot in front of the tegulæ, two beneath the wings, another on each side of the scutellum and the post-scutellum, yellow; the sides of the metathorax ferruginous; wings fusco-hyaline, with a darker cloud at their apical margins; the nervures fuscous, the costal nervure and stigma pale ferruginous; the legs ferruginous, with the tibiæ yellowish in front. Abdomen: the basal half of the first segment ferruginous, the apical half yellow; the apical margins of the third and fifth segments with a narrow yellow band; beneath, immaculate.

The male differs in having the vertex and metathorax black; the first segment of the abdomen is black at the base; the markings are the same, with the addition of two transverse spots on the vertex.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

98. CERCERIS VIDUATA. B.M.

Female. Length 6 lines.—Black: the punctures deep and close on the face, but more distant on the vertex; the clypeus elevated, forming a somewhat conical tubercle, subacute at the apex, the extreme apex black, the rest of the clypeus yellow; a line on the inner orbit of the eyes, not running higher than the antennæ, a large macula on the anterior angles of the face, the middle of the mandibles outside, and the carina between the antennæ, yellow; a yellow stripe crossing the vertex behind the eyes; the extreme base of the flagellum beneath fulvous; the face with short golden pubescence at the sides. Thorax: the mesothorax opake, the punctures shallow and distant; an interrupted line on the collar, a spot beneath the wings, the front of the tegulæ, a spot on each side of the scutellum, the post-scutellum, two longitudinal stripes on the metathorax, extending from the apex halfway towards the base, yellow; the fore wings with a fuscous cloud along their anterior margins; the anterior legs with a yellow stripe on the femora beneath; the tibiæ in front and the basal and apical joints of the tarsi ferruginous; the intermediate and posterior legs with the coxæ and femora beneath, the intermediate tibiæ in front, the posterior tibiæ at their base beneath, yellow; the basal joint of the intermediate and posterior tarsi pale testaceous. Abdomen: the first segment black and strongly punctured, the apical margin yellow; the rest of the abdomen ferruginous, with a fuscous stain in the middle of the first segment, the following segments more or less fuscous; the second segment subpetiolate, with a narrow yellow band on the apical margin; beneath, the first segment yellow and carinated in the middle, the second yellow with a ferruginous stain in the middle.

This may possibly prove to be the female of the *C. binodis* of Spinola; but, independent of the different colouring of the abdomen, the sculpture is very different: in *C. binodis* the thorax is strongly punctured, whilst in the present species the punctures on the mesothorax are very delicate, not being visible without a magnifying power.

Hab. Brazil (Para). (Coll. H. W. Bates.)

99. CERCERIS VULPINA. B.M.

Male. Length 5 lines.—Black, punctured: the face, scape in front, mandibles at their base, a large spot on the cheeks, a minute one behind the eyes, two minute ones on the vertex, yellow; the flagellum pale testaceous beneath. Thorax: an interrupted line on the collar united to a spot beneath the wings,

a curved line on each side of the pectus, two in front of the anterior coxæ, two on the prothorax beneath, the tegulæ, two lines on the disk of the mesothorax, a spot on each side of the scutellum, the post-scutellum, and the metathorax, yellow; the sides of the subcordate space, and an angular spot beneath it, black; the anterior margins of the fore wings fuscous; the coxæ and trochanters yellow beneath, the femora and tibiæ yellow in front; the anterior and intermediate tarsi yellow. Abdomen: the basal segment yellow, with a black spot in the middle of its base; the four following segments with a narrow yellow band on their apical margins.

Hab. Brazil.

100. CERCERIS BINODIS. B.M.

Cerceris binodis, *Spin. Ann. Soc. Ent. Fr.* x. new ser. 117. t. 3. f. 3 ♂ (1841).
Diamma Spinole, *Dahlb. Hym. Europ.* i. 225. 1.
Diesmus Spinolæ, *Dahlb. Hym. Europ. Synop. Spec.* i. 502. 1.

Hab. Cayenne; Brazil (Villa Nova). (Coll. H. W. Bates.)

This species has the appearance of a wasp, closely resembling some of the species of the genus *Zethus*; on closer inspection it will be found to be a *Cerceris*, differing from the generality of the species in having the basal segment ovate, and the second campanulate: in other respects it offers no remarkable difference. The neuration of the wings is identical with *Cerceris*.

101. CERCERIS CRIBROSA.

Cerceris cribrosa, *Spin. Ann. Soc. Ent. Fr.* x. new ser. 119. 74 ♀ ♂ (1841).

Hab. Cayenne.

102. CERCERIS DILATATA.

Cerceris dilatata, *Spin. Ann. Soc. Ent. Fr.* x. new ser. 118. 73 ♂ (1841).

Hab. Cayenne.

103. CERCERIS CHILENSIS. B.M.

Cerceris Chilensis, *Spin. Gay's Chili*, vi. 344. 1.

Hab. Chili. (Coll. F. Smith.)

104. CERCERIS GAYI.

Cerceris Gayi, *Spin. Gay's Chili*, vi. 346. 2.

Hab. Chili.

105. CERCERIS LÆVIGATA. B.M.

Female. Length 4 lines.—Black and very delicately punctured; the face, base of the mandibles, and a line behind the eyes, yellow; the flagellum fulvous beneath. Thorax: the collar, tubercles, a spot beneath the wings, the scutellum, and an oblong macula on each side of the post-scutellum, yellow; the anterior and intermediate tibiæ, and the posterior pair at their base, yellow; the anterior tarsi yellow, with the apical joints slightly ferruginous, the intermediate and posterior pair fusco-ferruginous; wings slightly coloured, with a fuscous cloud on the anterior margin of the superior pair. Abdomen very delicately and sparingly punctured and shining; the first segment with its apical margin yellow, a slight notch in the middle of the band; the second, third and fourth segments with a yellow fascia on their apical margins, very much attenuated in the middle and widened at the sides.

The male has a yellow band on the first and four following segments.

Hab. St. Domingo.

106. CERCERIS CLYPEATA. B.M.

Cerceris clypeata, *Dahlb. Hym. Europ.* i. 221.

Hab. North America (Wilmington, Delaware). (Coll. E. Doubleday, Esq.)

107. CERCERIS DESERTA. B.M.

Cerceris deserta, *Say, Narr. Exped. St. Peter's River, Append.* p. 76.

Hab. N. America (Missouri; Pennsylvania; North Carolina).

108. CERCERIS FUMIPENNIS. B.M.

Cerceris fumipennis, *Say, Bost. Journ.* i. 381. 1.

Hab. N. America (Indiana).

109. CERCERIS SEXTA.

Cerceris sexta, *Say, Bost. Journ.* i. 382. 2.

Hab. N. America (Missouri).

110. CERCERIS NIGRESCENS. B.M.

Female. Length 5 lines.—Black: the sides of the face and the clypeus pale yellow, the margins of the latter black; the mandibles yellow at their base; the clypeus transverse, projecting from its base, very obsoletely emarginate in front; the flagellum slightly fulvous towards the base beneath. Thorax: a minute spot on each side of the collar, another on the tegulæ and the post-scutellum, yellow; the mesothorax sparingly punctured, the metathorax strongly so, the subcordiform space at the base longitudinally striated; the anterior and intermediate tibiæ in front yellow; the tarsi ferruginous; the posterior legs entirely black; the wings subhyaline, the nervures ferruginous. Abdomen: the basal segment with a yellow spot on each side, the following segments with uninterrupted fasciæ narrowed in the middle; beneath, entirely black.

Hab. Nova Scotia.

111. CERCERIS DUFOURII.

Cerceris Dufourii, *Guér. Icon. Règ. Anim.* 444.

Hab. New Orleans.

112. CERCERIS VERTICALIS.

Female. Length 6 lines.—Black, thickly punctured; the head ferruginous behind the eyes; the scape and second joint of the flagellum ferruginous; the face below the antennæ yellow; the margins of the clypeus black; the mandibles ferruginous, their extreme base yellow. Thorax: the collar yellow, interrupted in the middle by a ferruginous spot; the post-scutellum and a spot on the tegulæ yellow; a large ferruginous blotch on each side of the metathorax; the wings smoky-hyaline; the legs ferruginous. Abdomen: the basal segment ferruginous, with a minute yellow spot on each side; the second segment yellow, with the basal margin and a produced quadrate spot in the middle ferruginous; the margins of the following segments with a narrow band which is widened at the sides; beneath, rufo-piceous, brightest at the base.

Hab. Georgia. (Coll. F. Smith.)

113. CERCERIS BICORNUTA. B.M.

Cerceris bicornuta, *Guér. Icon. Règ. Anim.* 443.

Hab. United States (New Orleans; Georgia; Delaware).

This species is very variable in colouring, the abdomen and

thorax being very indistinctly marked with fulvous; the post-scutellum is frequently yellow.

114. CERCERIS ELEGANS. B.M.

Male. Length 3 lines.—Black, coarsely punctured; the face below the antennæ, the scape in front, and the mandibles, yellow, the tips of the mandibles ferruginous; the anterior margin of the clypeus rounded; the anterior angles of the face produced into small quadrate lobes; the flagellum and scape behind ferruginous. Thorax: a spot on each side of the collar and the tegulæ in front yellow; wings smoky-hyaline and beautifully iridescent; the legs yellow, with the coxæ and the femora at their base more or less rufo-piceous; the metathorax very coarsely rugose. Abdomen: the two basal segments ferruginous, the apical margin of the second segment yellow; an elongate yellow spot on each side of the following segments on their apical margins, the spots widest at the margins of the segments and pointed within.

Hab. East Florida. (Coll. E. Doubleday, Esq.)

115. CERCERIS RUFO-PICTA. B.M.

Male. Length 4 lines.—Black, coarsely punctured; the face yellow below the antennæ; the anterior margin of the clypeus black, crenulated, and angular; the anterior margin of the face has on each side an angular filament close to the eye; the mandibles yellow, their tips ferruginous; the antennæ ferruginous; the flagellum fuscous above towards the apex, the apex pale. The prothorax, tegulæ, scutellum, post-scutellum, with sometimes a spot on each side, and the legs, ferruginous; the wings fusco-hyaline, the apical margins of the anterior wings darkest. Abdomen: the two basal segments ferruginous; the apical margin of the third with a narrow ferruginous band; the fourth and following segments more or less banded at the sides with ferruginous or sometimes with reddish-yellow.

Hab. East Florida. (Coll. E. Doubleday, Esq.)

Genus 15. PHILANTHUS.

Vespa, pt., *Fabr. Syst. Ent.* 362 (1775).
Crabro, pt., *Rossi, Mant.* i. 138 (1792).
Philanthus, pt., *Fabr. Ent. Syst.* ii. 288 (1793).
Simblephilus, *Jurine, Hym.* 185 (1807).
Trachypus, *Klug, Berl. Mag.* iv. 43 (1810).
Anthophilus, *Dahlb. Hym. Europ.* i. 497 (1843–5).

Div. 1. *Abdomen sessile.*

1. PHILANTHUS TRIANGULUM. B.M.

Vespa triangulum, *Fabr. Syst. Ent.* 373. 49 ♀. *Cab. Mus. Dom. Banks.*; *Sp. Ins.* i. 469. 68; *Mant. Ins.* 294. 82.
Villers, Entom. iii. 276. 25.
Christ. Hym. 136.
Oliv. Encycl. Méth. vi. 693. 116.
Vespa limbata, *Oliv. Encycl. Méth.* vi. 693. 118.
Crabro androgynus, *Rossi, Faun. Etrus. Mant.* i. 138. 305.
Philanthus pictus, *Panz. Faun. Germ.* 43. 23 ♂.
Fabr. Syst. Piez. 362. 5.
Philanthus apivorus, *Latr. Fourm.* 317. t. 12. f. 2 *a, b.*
Spin. Ins. Ligur. i. 95. 1.
Philanthus discolor, *Panz. Faun. Germ.* 63. 18 ♂.
Philanthus triangulum, *Fabr. Ent. Syst.* ii. 289. 2; *Syst. Piez.* 302. 4.
Duméril, Consid. t. 59. f. 6. 7.
Van d. Lind, Obs. ii. 122. 2.
Shuck. Foss. Hym. 246. 1.
Dahlb. Hym. Europ. i. 187. 115.
St. Farg. Hym. iii. 34. 2.
Wesm. Hym. Foss. Belg. 105. 6.
Simblephilus diadema, *Jurine*, t. 10. gen. 18 ♀.
Philanthus androgynus, *Curtis, Brit. Ent.* vi. t. 273 ♀.

Hab. Britain; France; Germany; Italy; Denmark.

2. PHILANTHUS CORONATUS. B.M.

Philanthus coronatus, *Fabr. Ent. Syst.* ii. 288. 1; *Syst. Piez.* 301. 1.
Latr. Hist. Ins. iii. 367.
Panz. Faun. Germ. 84. 23.
Van d. Lind, Obs. ii. 121. 1.
Dahlb. Hym. Europ. i. 189. 116.
St. Farg. Hym. iii. 36. 3.
Simblephilus coronatus, *Jurine, Hym.* 188 ♀.

Hab. Italy; France.

3. PHILANTHUS VENUSTUS.

Crabro venustus, *Rossi, Faun. Etrus.* ii. 94. 889.
Philanthus venustus, *St. Farg. Hym.* iii. 37. 4.

Hab. France.

4. PHILANTHUS MELLINIFORMIS. B.M.

Male. Length 3½ lines.—Black: the face below the antennæ, a large ovate spot on the forehead in front of the anterior ocellus, the scape in front, and five or six of the basal joints of the flagellum in front, yellow; a spot at the base of the mandibles yellow. Thorax: the collar, tubercles, post-scutellum, tegulæ, tips of the femora, tibiæ and tarsi, yellow; the wings hyaline and iridescent, the nervures testaceous, with the stigma yellow. Thorax strongly punctured, with two elevated longitudinal carinæ in the middle, and an impressed line on each side over the tegulæ; the metathorax with a depression at its base surrounded by a smooth shining space. Abdomen shining, with strong scattered punctures; the basal segment with a broad interrupted yellow band in the middle, the second with two very large ovate yellow maculæ placed obliquely and uniting in the middle; the four following segments with narrow yellow fasciæ on their apical margins, the first two slightly interrupted; beneath, black.

Hab. Sicily.

5. PHILANTHUS PULCHERRIMUS. B.M.

Female. Length 4 lines.—Black: the face below the antennæ, the mandibles, three basal joints of the flagellum, the scape, a coronet-shaped spot on the forehead, and a line behind the eyes, yellowish-white; the flagellum fulvous in front. Thorax shining, with deep scattered punctures; the collar, tubercles, and a spot behind them, the hinder margin of the scutellum, the post-scutellum, the tips of the femora, the tibiæ and tarsi, pale yellowish-white; the coxæ and femora more or less rufo-piceous; the wings hyaline, the nervures testaceous, the stigma yellow. Abdomen shining, with fine scattered punctures; the basal segment ferruginous, with a minute white spot on each side; the second segment with a broad waved fascia, the third spotted at the side, the fourth with a very broad fascia, the fifth with a narrow band on its apical margin, widened in the middle and at the sides, and the sixth entirely yellowish-white; beneath, with pale irregular bands.

Male.—Smaller, but very like the female; and the face is more convex; the scutellum is entirely pale; the abdomen has only two pale fasciæ, one on the second and another on the fourth segment.

Hab. India.

6. PHILANTHUS SULPHUREUS.

Male. Length 4 lines.—Sulphur-yellow, shining and strongly

punctured; the face below the antennæ white; the mandibles, the scape in front, and two or three of the basal joints of the flagellum, nearly white, the following joints becoming gradually dark fusco-ferruginous towards the apex; the eyes brown, a black line round them above, from which a line passes across the vertex, and a second across the forehead passing between the ocelli. Thorax: the mesothorax with three longitudinal black stripes united by a transverse line at the apical and basal margins; a black stripe at the extreme basal margin of the metathorax, an angular black spot in the middle, in which is a deep fossulet; wings hyaline, the nervures pale testaceous, the stigma yellow; the femora pale ferruginous, their base and apex yellow. Abdomen: the base and the apical margins of the segments ferruginous.

Hab. Northern India. (Coll. F. Smith.)

7. PHILANTHUS DEPREDATOR.

Male. Length 6½ lines.—Ferruginous: the face as high as the emargination of the eyes, the scape in front, the cheeks, and the mandibles at their base, yellow. Thorax: the collar, sides of the breast, the tegulæ and a minute spot over them, the scutellum, post-scutellum, and a spot on each side of the metathorax, yellow; an oblong depression at the base of the metathorax in the middle, the depression black; the wings fulvo-hyaline, the nervures ferruginous; the apex of the wings clouded, the anterior pair darkest; the tibiæ and tarsi yellow; the anterior and intermediate femora yellow beneath. Abdomen: the second, third and fourth segments with a large yellow macula on each side; the fifth, sixth and seventh yellowish beneath; the second and third segments yellow, with their base narrowly ferruginous; the second segment has on each side a longitudinal black line terminating at the middle of the segment.

Hab. India. (Coll. F. Smith.)

8. PHILANTHUS PALLIDUS.

Philanthus pallidus, *Klug, Symb. Phys.* dec. v. t. 47. f. 8 ♂.

Hab. Ethiopia (Ambukohl).

9. PHILANTHUS DIMIDIATUS.

Philanthus dimidiatus, *Klug, Symb. Phys.* dec. v. t. 47. f. 7 ♂.

Hab. Ethiopia (Ambukohl).

10. PHILANTHUS RAPTOR.

Philanthus raptor, *St. Farg. Hym.* iii. 38. 5.
Lucas, Explo. Sc. Algér. iii. 259.

Hab. Algeria (Oran).

11. PHILANTHUS DIADEMA. B.M.

Philanthus diadema, *Fabr. Ent. Syst.* ii. 289. 3, & *Cab. Mus. Dom. Banks.*; *Syst. Piez.* 302. 6.
Coqueb. Ill. Icon. Ins. dec. iii. t. 22. f. 1.
Philanthus Abdelkader, *St. Farg. Hym.* iii. 33. 1.
Lucas, Explo. Sc. Algér. iii. 257. t. 13. f. 7.

Hab. Africa (the Cape of Good Hope; Port Natal; the Gambia; Sierra Leone; Egypt; Algeria).

This species has been obtained from all the above localities; on examining a large number of specimens, it proves to be an insect subject to much variety. The most highly coloured individuals are from the Gambia: some specimens have the head and thorax ferruginous; there are two black spots above the tridentate spot on the face, and another which encloses the ocelli; the thorax has a black stain before the scutellum and another at the base of the metathorax, otherwise entirely ferruginous and yellow. Specimens from the Cape have usually less of the yellow and ferruginous colouring, and the scutellum is sometimes nearly or entirely black.

12. PHILANTHUS FORMOSUS. B.M.

Male. Length 6 lines.—Black: the face as high as the emargination of the eyes, yellow; a minute black spot above the clypeus, and another above the insertion of each antenna; the mandibles and base of the flagellum ferruginous; the hinder margin of the vertex and cheeks ferruginous. Thorax: the collar with a narrow yellowish-white line, sometimes a yellow interrupted line on the post-scutellum; wings fuscous, palest at the hinder margin of the posterior pair; the nervures, tegulæ and legs ferruginous; the coxæ and sometimes the base of the femora black. Abdomen: the first segment, the apical margins of the four following, and the two apical segments entirely, ferruginous; the second segment has on each side at its base an oblong whitish macula pointed within; the third, fourth and fifth segments have a narrow undulating white marginal line.

Hab. Cape of Good Hope.

13. PHILANTHUS DUFOURII. B.M.

Philanthus Dufourii, *Lucas, Explo. Sc. Algér.* iii. 258. t. 13. f. 6.

Hab. Algeria; Cape of Good Hope.

14. PHILANTHUS FUSCIPENNIS.

Philanthus fuscipennis, *Guér. Icon. Règ. Anim.* iii. 443.

Hab. Senegal.

15. PHILANTHUS SICARIUS. B.M.

Female. Length 5 lines.—Head and thorax black; abdomen and legs ferruginous; the wings dark fuscous, paler at their base; the mandibles, clypeus, face on each side, two spots between the antennæ, a transverse line above, the scape in front, and a spot behind the eyes, yellow; a black line on each side of the clypeus, not extending to the anterior margin of the face; the tips of the mandibles black; the flagellum beneath and the apical joint entirely fulvous; an interrupted line on the collar and a spot on the tegulæ yellow. Abdomen closely and finely punctured, and more or less yellow beneath.

Hab. West Africa (Whydah); Fernando Po.

16. PHILANTHUS BUCEPHALUS. B.M.

Male. Length 4½–6½ lines.—Head and thorax black, very closely and rather finely punctured, opake; the face as high as the antennæ, a waved transverse line above their insertion, an oblong angular spot behind the eyes, and a stripe on the mandibles, yellowish-white: in rare instances the line above the antennæ is obsolete. Thorax: a slightly interrupted line on the collar, a spot beneath the wings, sometimes obsolete, a spot on the tegulæ, and the scutellum and post-scutellum, yellowish-white; the wings dark fuscous, with a violet iridescence; the femora at their apex, the anterior and intermediate tibiæ in front, and the anterior tarsi in front, yellow; the tarsi rufo-testaceous; the extreme base of the posterior tibiæ yellow. Abdomen yellow with the base black, and usually a ferruginous stain at the apex; the abdomen is very finely and closely punctured, and is subopake.

Hab. The Gambia.

This species is nearly allied to the *P. fumipennis* of Guérin; but the specimens which agree with the description of that author have a distinctly enclosed rugose space at the base of the metathorax; the abdomen is not so closely punctured, and the scutellum and post-scutellum are black in both sexes.

17. PHILANTHUS BASALIS. B.M.

Female. Length 5¼ lines.—Black: the head and thorax closely and rather finely punctured; the punctures on the scutellum distant; the clypeus and anterior margins of the face, a line on the inner orbit of the eyes, terminating at their emargination, where they are narrowest, an oblique spot above the insertion of each antenna, a short narrow line in front of the anterior ocellus, two spots on the vertex, a line behind the eyes, and the mandibles, yellow; the latter black at their apex. Thorax: a narrow line on the collar, a spot behind the tegulæ, and the scutellum, yellow; the wings slightly coloured, a fuscous spot beyond the marginal cell; the femora ferruginous, beneath rufo-piceous; the tibiæ black, the anterior and intermediate pairs yellow in front, their tarsi yellow beneath; a yellow spot at the tip of the femora in front. Abdomen smooth and shining, the first segment ferruginous at the base, and having on each side an oblong transverse macula; the three following segments with a narrow slightly interrupted yellow band on their apical margins; beneath, the second and two following segments have on each side a broad oblique stripe.

Hab. Ceylon.

18. PHILANTHUS INCERTUS.

Trachypus incertus, *Spin. Gay's Chili*, vi. 336. 2.

Hab. Chili.

19. PHILANTHUS SOLIVAGUS.

Philanthus solivagus, *Say, Bost. Journ.* i. 383.

Hab. N. America (Indiana).

20. PHILANTHUS BARBATUS.

Male. Length 5 lines.—Black; closely and rather finely punctured on the face; the vertex shining, the punctures scattered; the anterior ocellus placed in a fossulet; the clypeus, anterior margin of the face, inner orbit of the eyes not quite so high as their emargination, and a large ovate spot above the antennæ, yellow; the face furnished with a long dark beard on each side of the clypeus or its anterior margin. Thorax shining, sparingly punctured; a spot beneath the wings and the post-scutellum yellow; wings fulvo-hyaline, the nervures pale ferruginous. Abdomen shining, the first segment with a few large deep punctures, or foveæ; the second segment with similar puncturing; the third segment has a few punctures on its apical

margin; a minute spot on each side of the basal segment; a broad interrupted fascia in the middle of the second segment; the third, fourth and fifth segments with a narrow fascia on their apical margins, abruptly widened at the lateral margins, yellow; beneath, black.

Hab. North America. (Coll. F. Smith.)

21. PHILANTHUS VENTILABRIS. B.M.

Philanthus ventilabris, *Fabr. Ent. Syst. Supp.* 269. 11–12.
Anthoplrilus ventilabris, *Dahlb. Hym. Europ.* i. 497.

Hab. North Carolina; East Florida (St. John's Bluff). (Coll. E. Doubleday, Esq.)

22. PHILANTHUS POLITUS. B.M.

Philanthus politus, *Say, Narr. Exped. St. Peter's River, Append.* p. 75. 2.

Hab. Pennsylvania.

23. PHILANTHUS PUNCTATUS. B.M.

Philanthus (Cheilopogon) punctatus, *Say, Narr. Exped. St. Peter's River, Append.* ii. p. 75. 1.

Hab. Pennsylvania; North Carolina.

24. PHILANTHUS CRABRONIFORMIS. B.M.

Male. Length 4½ lines.—Black: the face below the antennæ, with a line continued upwards along the orbit of the eyes as high as the emargination, a large campanulate-shaped spot above the clypeus, a spot behind the eyes, two on the vertex, the mandibles, scape, and three basal joints of the flagellum in front, yellow; the head large, shining, finely but not closely punctured. Thorax: the hinder margin of the collar raised, yellow, and subinterrupted in the middle; the tegulæ, tubercles, two spots beneath the wings, two on the scutellum, the post-scutellum, a spot at the lateral posterior angles of the metathorax, the apex of the femora, the tibiæ and the tarsi, yellow; the wings fulvo-hyaline, the nervures pale ferruginous, with a faint cloud beyond the marginal cell; the mesothorax smooth and shining, and having a few scattered punctures; in the middle is a deep longitudinal channel, and a finer one on each side; the posterior margin closely punctured in front of the scutellum. Abdomen shining, with deep scattered punctures; the first segment with a broad slightly interrupted band in the middle; the second seg-

ment has a broad band at its base, its hinder margin waved; the two following segments yellow, except their extreme base; the three apical segments entirely yellow.

Hab. California.

25. PHILANTHUS FRIGIDUS. B.M.

Male. Length 5 lines.—Black, closely and rather finely punctured; the clypeus and an oblong spot above it, a minute spot between the antennæ, the sides of the face a little above the antennæ, the scape in front, the mandibles, and a short narrow line behind the eyes, yellow; the flagellum fulvous beneath; the face and cheeks with a thin cinereous pubescence; the eyes not emarginate. Thorax: the collar, tubercles, a spot in front of the tegulæ, a transverse line at the base of the scutellum, a spot on the post-scutellum, the tibiæ, tarsi, and tips of the femora, yellow; wings hyaline, the nervures pale ferruginous. Abdomen: an ovate spot on each side of the basal segment, a transverse slightly interrupted fascia a little before the apical margin of the second, a narrower one on the third, fourth and fifth segments, similarly situated and interrupted, yellow; a similar band on the three intermediate segments beneath, slightly interrupted and rather broader than the fasciæ above.

Hab. Nova Scotia. (Coll. Lieut. Redman.)

Div. 2. *Abdomen petiolated.*

26. PHILANTHUS GOMESII. B.M.

Trachypus Gomesii, *Klug, Berl. Mag.* iv. 43. t. 1. f. 5.
Philanthus petiolatus, *Spin. Ann. Soc. Ent. Fr.* v. 121. 309. t. 3. f. 4 ♀ (1841).
Philanthus Gomesii, *Sauss. Mém. Soc. Phys. Genève*, xiv. 8. 1.
Simblephilus Spinolæ, *Dahlb. Hym. Europ.* i. 190. 43.

Hab. Brazil.

27. PHILANTHUS DENTICOLLIS.

Trachypus denticollis, *Spin. Gay's Chili*, vi. 335. 1.

Hab. Chili.

28. PHILANTHUS PATAGONENSIS.

Philanthus (Trachypus) Patagonensis, *Sauss. Mém. Soc. Phys. Genève*, xiv. 10. 4. t. f. 1 ♂.

Hab. Patagonia.

29. PHILANTHUS ROMANDI.

Philanthus (Trachypus) Romandi, *Sauss. Mém. Soc. Phys. Genève*, xiv. 8. 3 ♀.

Hab. Brazil.

30. PHILANTHUS (TRACHYPUS) ELEGANS. B.M.

Male. Length 4½ lines.—Black: the head closely punctured, the face below the antennæ covered with silvery pubescence; a minute spot on each side of the clypeus in front, another at the anterior part of the emargination of the eyes, the scape, and a spot at the base of the mandibles, yellow; the scape with a black spot behind; the two basal joints of the flagellum and also the apical one fulvous. Thorax: the mesothorax shining, with scattered punctures, and having anteriorly three deeply impressed lines which extend to the disk; the collar (which is raised and has the lateral angles rounded), the tubercles, a spot beneath the wings, another on the tegulæ in front, two at the base of the scutellum, the post-scutellum, and two elongate spots at the apex of the metathorax, yellow; the wings hyaline, with a narrow fuscous line running from the stigma to the apex of the wing; the tips of the anterior and intermediate femora, the tibiæ and tarsi, yellow; the posterior tibiæ with a yellow stripe above, not extending to their apex; the tarsi white, with the tips of the joints fuscous; the anterior and intermediate tibiæ with a rufo-piceous stain beneath. Abdomen: the extreme apex yellow; the second segment with a waved yellow fascia a little before its apical margin, continued beneath; the second segment has a narrow fascia a little before its apical margin, emarginate or interrupted on each side; the following segments have each a continuous fascia; beneath, the margins are yellowish on each side.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

31. PHILANTHUS (TRACHYPUS) APICALIS. B.M.

Male. Length 5–6 lines.—Black and shining; head strongly and closely punctured; the anterior stemma placed in a fossulet from which an impressed line passes down to the insertion of the antennæ, below which the face is covered with a golden pubescence; the first joint of the flagellum of a yellowish-white beneath; the apical joint truncated at the tip, which is of an orange-yellow. Thorax: the mesothorax strongly punctured, with a deep central depression at its base; the base of the metathorax smooth and shining, with a central abbreviated impressed line, which termi-

nates in a deep fovea at the verge of the truncation; immediately beneath is a second fovea, which extends to the apex; the sides of the metathorax closely and finely punctured; the anterior and intermediate tibiæ and all the tarsi yellowish-white; the apex of the tarsal joints rufo-piceous; the anterior and intermediate femora yellow at their apex in front; the anterior tibiæ with a row of cilia beneath; the collar yellow, transverse, elevated, with the lateral angles acute; a spot on the tegulæ in front, the post-scutellum, and a longitudinal line at the apex of the metathorax on each side of the insertion of the petiole of the abdomen, yellow; the wings hyaline, with a fuscous spot at the apex of each wing; the apex of the petiole with a spot on each side; the first, third, fourth and fifth segments with a narrow fascia on their apical margins, the three latter fasciæ bisinuated on their anterior margins.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

ADDENDA ET CORRIGENDA.

Page 10. Mutilla bifasciata, *Klug*, (nec *Swed.*) *change to* M. bizonata.

Page 30. *After* No. 64, *add* 64* Mutilla soluta, *Erichs. Wiegm. Arch.* (1842) *Erichs. Ins. Van Diem. Land.* and Mutilla blanda, *Erichs. Ins. Van Diem. Land.*

Page 36. Mutilla rufiventris (nec *Klug*) *change to* M. ruficeps.

Page 116. *After* line 22, *add* Fam. I. SAPYGIDÆ.

Page 393. Crabro affinis (nec *St. Farg.*) *change to* Crabro cognatus.

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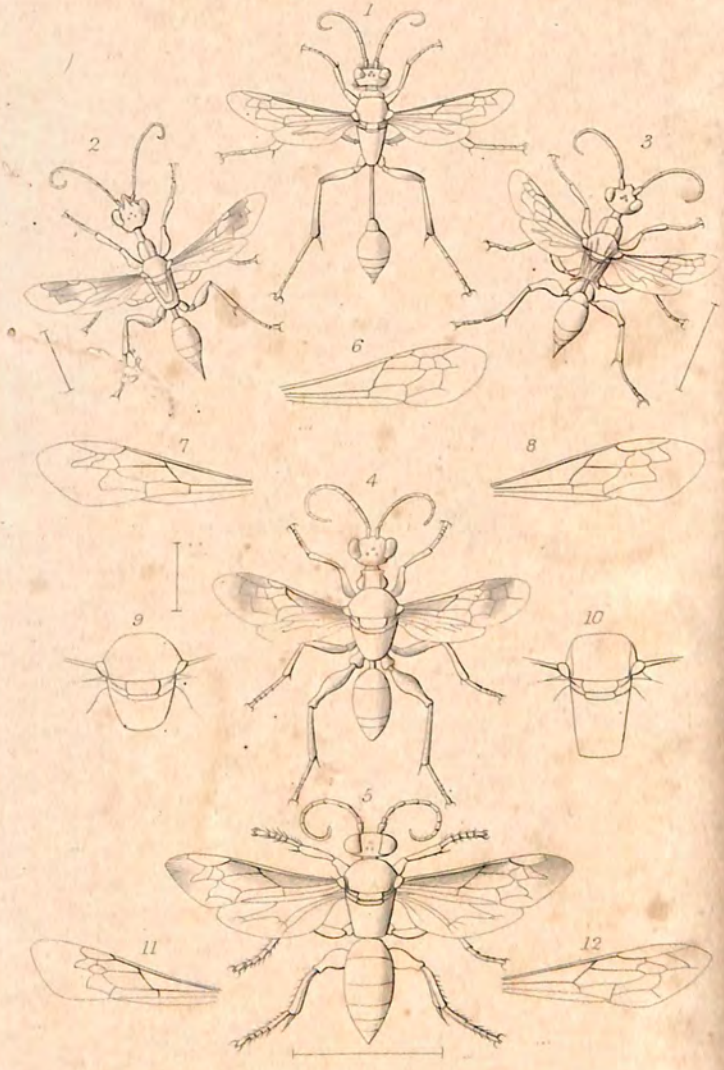
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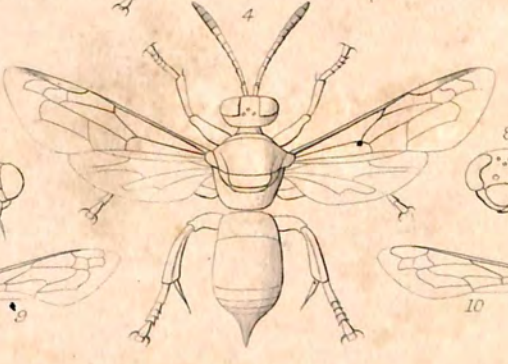
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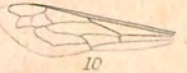
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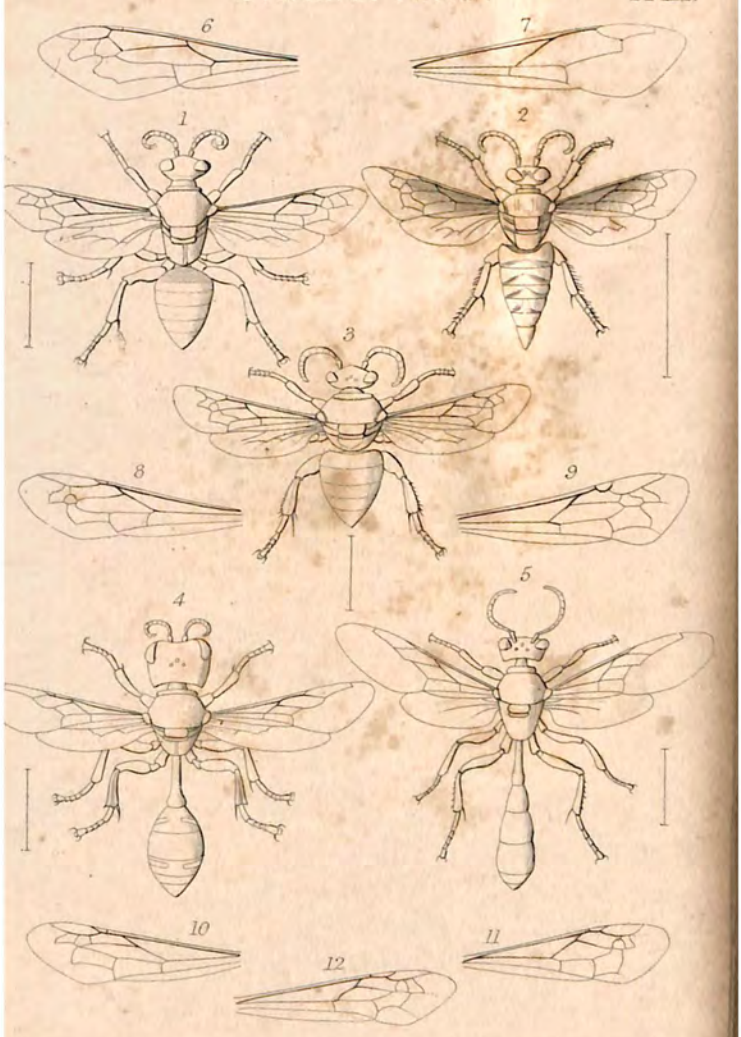
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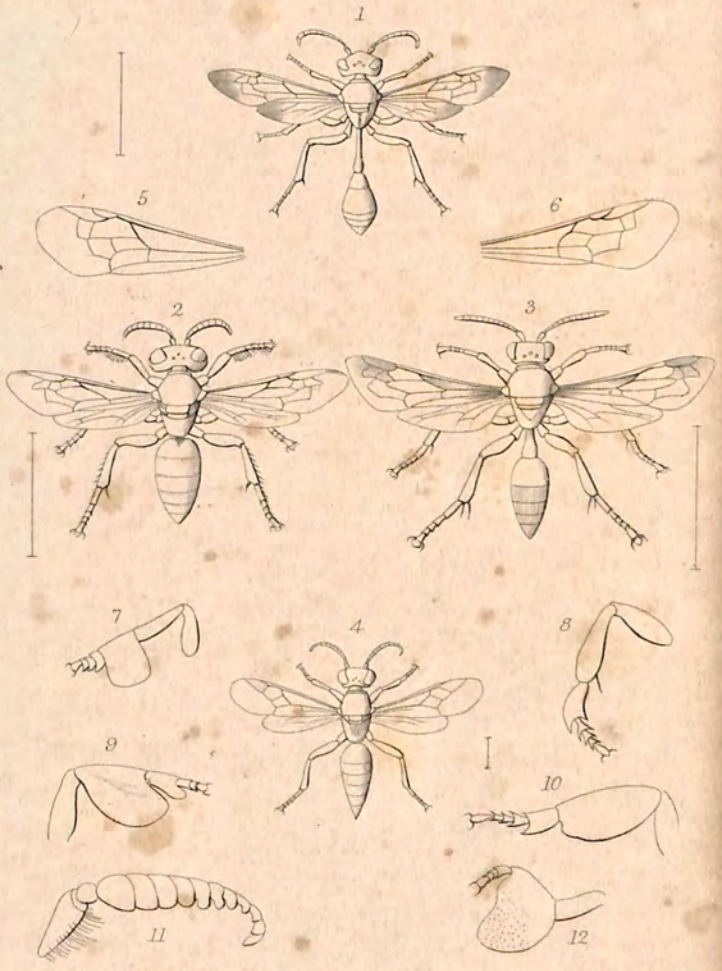
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EXPLANATION OF THE PLATES.

PLATE VI.

Fig.
1. *Trigonopsis hæmorrhoidalis.*
2. *Sphex ephippium.*
3. *Podium luteipennis.*
4. *Harpactopus crudelis.*
5. Wing of *Ammophila.*
6. Wing of *Coloptera.*
7. Wing of *Miscus.*
8. Wing of *Chlorion.*
9. Wing of *Pronæus.*
10. Wing of *Stethorectus.*

PLATE VII.

1. *Pelopœus lætus.*
2. *Rhinopsis Abbottii.*
3. *Ampulex chalybeus.*
4. *Aphelotoma Tasmanica.*
5. *Larrada aurulenta.*
6. Wing of *Dolichurus.*
7. Wing of *Tachytes.*
8. Wing of *Trirogma.*
9. Thorax of *Tachytes.*
10. Thorax of *Larrada.*
11. Wing of *Larraxena.*
12. Wing of *Exeirus.*

PLATE VIII.

1. *Astata unicolor.*
2. *Solierella miscophoides.*
3. *Pison regalis.*
4. *Larra Hogardii.*
5. Wing of *Miscophus.*
6. Wing of *Dinetus.*
7. Head of *Bembex.*
8. Head of *Pison.*
9. Wing of *Bembex.*
10. Wing of *Monedula.*

PLATE IX.

Fig.
1. *Sericophorus chalybeus.*
2. *Palarus humeralis.*
3. *Helioryctes melanopyrus.*
4. *Crabro* (*Dasyproctus*) *fraternus.*
5. *Crabro* (*Podagritus*) *Gayi.*
6. Wing of *Larra.*

Fig.
7. Wing of *Oxybelus.*
8. Wing of *Nysson.*
9. Wing of *Gorytes.*
10. Wing of *Harpactus.*
11. Wing of *Alyson.*
12. Wing of *Mellinus.*

PLATE X.

1. *Stigmus pendulus.*
2. *Psen ater.*
3. *Cerceris orientalis.*
4. *Cerceris* (*Trachypus*) *binodis.*
5. *Crabro cribrarius.*
6. Wing of *Cemonus.*
7. Wing of *Philanthus.*
8. Wing of *Ceratophorus.*
9. Wing of *Pemphredon*
10. Wing of *Diodontus.*
11. Wing of *Passalæcus.*

PLATE XI.

1. *Philanthus* (*Trachypus*) *apicalis.*
2. *Philanthus diadema.*
3. *Gorytes Natalensis.*
4. *Nitela Spinolæ.*
5. Wing of *Ceratophorus.*
6. Wing of *Cemonus.*
7. Anterior leg of *Crabro vexillatus* ♂.
8. Anterior leg of *Crabro palmipes* ♂.
9. Anterior leg of *Crabro scutatus* ♂.
10. Anterior leg of *Crabro cetratus* ♂.
11. Antennæ of *Crabro cribrarius* ♂.
12. Anterior tarsus of *Crabro.*

List of the typical specimens of Fossorial Hymenoptera in the Museum at Kiel, described by Fabricius in the *Systema Piezatorum*, referred by Professor Behn to the genera in which they appear in this Catalogue.

Ceropales spinosa,	*Syst. Piez.*	p.	186. 5.	Nysson spinosus.
—— ruficollis,	„	„	186. 6.	Harpactus lævis (var.).
Pompilus assimilis,	„	„	189. 9.	Larra fasciata.
—— labiatus,	„	„	191. 16.	Tachytes labiatus.
—— tentonus,	„	„	194. 34.	Larrada anathema.
—— maculatus,	„	„	196. 42.	Nysson maculatus.
—— pictus,	„	„	196. 43.	Dinetus pictus ♂.
—— guttatus,	„	„	196. 44.	—— pictus ♀.
—— bicolor,	„	„	198. 56.	Tachytes bicolor.
Pelopœus abbreviatus	„	„	204. 8.	Ammophila abbreviata.
Sphex sabulosa,	„	„	205. 1.	—— sabulosa.
—— clavus,	„	„	206. 3.	—— holosericea.
Pepsis arenaria,	„	„	207. 1.	—— viatica.
—— lutaria,	„	„	208. 2.	—— lutaria.
—— crucis,	„	„	209. 4.	Sphex crucis.
—— fervens,	„	„	209. 6.	Parasphex fervens.
—— luteipennis,	„	„	210. 10.	Podium luteipennis.
—— flavipennis,	„	„	210. 13.	Sphex flavipennis.
—— maxillosa,	„	„	213. 27.	—— flavipennis.
—— violacea,	„	„	211. 16.	Pelopœus violaceus.
—— cyanea,	„	„	211. 17.	—— cyaneus.
—— femorata,	„	„	212. 20.	—— femoratus.
Chlorion lobatum,	„	„	217. 1.	Chlorion lobatum.
—— ciliatum,	„	„	218. 2.	Pronæus ciliatus.
—— ichneumoneum,	„	„	219. 6.	Sphex ichneumonea.
—— compressum,	„	„	219. 7.	Ampulex compressum.
Bembex maculata,	„	„	222. 2.	Monedula maculata.
—— signata,	„	„	223. 3.	—— signata.
—— punctata,	„	„	223. 4.	—— punctata.
—— rostrata,	„	„	223. 5.	Bembex rostrata.
—— fasciata,	„	„	224. 6.	—— fasciata.
—— olivacea,	„	„	224. 7.	—— olivacea.
—— glauca,	„	„	224. 8.	—— glauca.
—— lunata,	„	„	224. 10.	—— lunata.
—— repanda,	„	„	225. 12.	—— repanda.
—— americana,	„	„	225. 13.	—— americana.
—— spinosa,	„	„	225. 14.	Monedula spinosa.
—— continua,	„	„	225. 15.	—— continua.
—— striata,	„	„	226. 17.	—— striata.
—— integra,	„	„	226. 18.	Larra integra.
—— 6-fasciata,	„	„	226. 20.	—— sexfasciata.

Liris interrupta,	*Syst. Piez.*	p.	230. 8.	Palarus interruptus.
Mellinus mystaceus,	„	„	297. 1.	Gorytes mystaceus ♂.
—— campestris,	„	„	299. 9.	—— mystaceus ♀.
—— ruficornis,	„	„	298. 3.	Mellinus sabulosus.
—— 4-fasciatus,	„	„	298. 5.	Gorytes quadrifasciatus.
—— tristrigatus,	„	„	299. 7.	—— tristrigatus.
—— tricinctus,	„	„	299. 8.	Nysson spinosus.
—— 5-cinctus,	„	„	299. 11.	Gorytes quinquecinctus.
—— fulvicornis,	„	„	299. 13.	Mellinus sabulosus.
Philanthus auritus,	„	„	301. 2.	Cerceris arenaria.
—— rufipes,	„	„	303. 8.	—— tuberculata.
—— arenarius,	„	„	303. 9.	—— arenaria.
—— labiatus,	„	„	303. 10.	—— labiata.
—— ornatus,	„	„	304. 11.	—— ornata.
—— flavipes,	„	„	304. 13.	Palarus flavipes.
—— 5-cinctus,	„	„	304. 15.	Cerceris arenaria.
—— 4-fasciatus,	„	„	305. 16.	—— arenaria.
—— interstinctus,	„	„	306. 21.	—— interstincta.
Crabro spinosus,	„	„	307. 1.	Nysson spinosus.
—— fossorius,	„	„	308. 3.	Crabro fossorius.
—— cephalotes,	„	„	308. 5.	—— cephalotes.
—— lapidarius,	„	„	309. 6.	—— vexillatus.
—— nitidulus,	„	„	309. 7.	Tachytes nitidula.
—— philanthoides,	„	„	309. 11.	Crabro vexillatus.
—— sinuatus,	„	„	310. 12.	—— cephalotes.
—— peltatus,	„	„	311. 15.	—— patellatus.
—— cribrarius,	„	„	311. 16.	—— cribrarius.
—— pterotus,	„	„	311. 17.	—— pterotus.
—— clypeatus,	„	„	312. 18.	—— vexillatus.
—— scutatus,	„	„	312. 19.	—— scutatus.
—— mediatus,	„	„	312. 20.	—— subpunctatus.
—— vagus,	„	„	313. 22.	—— vagus.
—— tridens,	„	„	313. 23.	Larra tridens.
—— dimidiatus,	„	„	313. 24.	Crabro dimidiatus.
—— tricinctus,	„	„	313. 25.	Gorytes tricinctus.
Pemphredon leucostoma,	„		314. 1.	Crabro leucostoma.
—— lugubris,	„	„	315. 2.	Pemphredon lugubris.
—— crassipes,	„	„	315. 3.	Crabro clavipes.
—— tibialis,	„	„	315. 4.	—— tibialis.
—— albilabris,	„	„	316. 8.	—— albilabris.
—— minutus,	„	„	316. 9.	Diodontus minutus.
Oxybelus uniglumis,	„	„	316. 2.	Oxybelus uniglumis.
—— lineatus,	„	„	317. 3.	—— lineatus.
—— mucronatus,	„	„	318. 5.	—— mucronatus.

List of the typical specimens of Fossorial Hymenoptera in the Banksian Collection, preserved in the Museum of the Linnæan Society of London, described by Fabricius in the *Systema Piezatorum*; referred to the genera in which they appear in this Catalogue, with the size of the typical specimens in twelfths of an inch.

Pelopœus erithrocephalus,	*S. Piez.*	p.	203. 2.	Ammophila erythrocephala.
—— Madraspatanus,	„	„	203. 3.	Pelopœus Madraspatanus.
Sphex clavus,	„	„	206. 3.	Ammophila clavus.
Pepsis hæmorrhoidalis,	„	„	209. 8.	Sphex hæmorrhoidalis.
—— Pennsylvanica,	„	„	211. 15.	—— Pennsylvanica.
—— tibialis,	„	„	212. 21.	Pelopœus tibialis.
Chlorion lobatum,	„	„	217. 1.	Chlorion lobatum.
—— Sibiricum,	„	„	218. 4.	Ampulex Sibiricum.
—— compressum,	„	„	219. 7.	—— compressum.
Bembex punctata,	„	„	223. 4.	Monedula punctata.
Crabro maculatus,	„	„	309. 9.	Crabro maculatus.

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